



RFP NO.: NIMH-01-DN-0018

TITLE: "Mouse Neuroscience Phenotyping and Distributing Center"

OMB No.: 0990-0115

ISSUED BY: Robert D. Barnie
Contracting Officer
National Institute of Mental Health
Contracts Management Branch
6001 Exec. Blvd., Rm. 6107, MSC 9603
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DATE ISSUED: June 19, 2001

DATE DUE: November 9, 2001, 3:30 pm Eastern Time

PURCHASE AUTHORITY: Public Law 95-128 as amended

SMALL BUSINESS SET-ASIDE: No, NAICS Code 541710

JUST IN TIME: Yes

OFFER EXPIRATION DATE: Offers will be valid for 120 days unless a different period is specified by the offeror.

NOTE: OFFERORS ARE RESPONSIBLE FOR ROUTINELY CHECKING THE NIMH WEBSITE AT <http://www.nimh.nih.gov/grants/indexcon.cfm> AND/OR FEDBIZOPPS AT <http://www.fedbizopps.gov/> FOR ANY POSSIBLE SOLICITATION AMENDMENTS THAT MAY BE ISSUED. NO ADDITIONAL NOTIFICATION OF ANY AMENDMENTS WILL BE PROVIDED BY THIS OFFICE.

Dear Sir/Madam:

The National Institute of Mental Health (NIMH) invites you to submit a proposal in accordance with the requirements and instructions of Request for Proposals (RFP) No. NIMH-01-DN-0018. Proposals are being solicited under Full and Open Competitive procedures.

It is expected that one (1) completion contract will be awarded on or about February 1, 2002, with a base period of one (1) year and five (5) 1-year options. Some aspects of the Statement of Work (SOW) will be reimbursed on a fixed unit price basis while other aspects will be reimbursed on a cost reimbursement basis. In addition, the resulting contract will contain an option for the performance of additional services.

The RFP does not commit the Government to pay costs for the preparation and submission of a proposal. It is also brought to your attention that the Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with any acquisition action.

SPECIAL ATTENTION SHOULD BE DIRECTED TO THE TECHNICAL PROPOSAL INSTRUCTIONS & BUSINESS PROPOSAL INSTRUCTIONS CONTAINED IN ATTACHMENT 4. Your attention is further directed to the "Proposal Intent Response Sheet" contained in ATTACHMENT 5. Please complete this form and return it to this office via mail, fax or email on or before September 17, 2001. This will allow NIMH to expedite preparations for the technical review of proposals.

The documents included with this electronic RFP package are as follows:

- I. Streamlined RFP
 - A. Statement of Work (SOW) (Attachment 1)
 - B. Deliverables and Reporting Requirements (Attachment 2)
 - C. Evaluation Factors for Contract Award (Attachment 3)
- II. Specific RFP Instructions, Conditions and Notices to Offerors (Attachment 4)
- III. Proposal Intent Response Sheet (Attachment 5)
- IV. Applicable RFP References (Attachment 6)
 - A. General Clauses and Provisions
 - B. Forms, Formats and Attachments
 - C. Uniform Contract Format (sample contract clauses Section B-H)
- V. Reference Material (Attachment 7)

The attachments listed above represent all the necessary information required for the submission of a proposal for this acquisition.

Your proposal must be signed by an official authorized to contractually bind your organization and must indicate that it is valid for a period of at least 120 days. One (1) original and ten (10) copies of your technical proposal and one (1) original and five (5) copies of your Business/Cost Proposal, must be

received by the Contracting Officer NO LATER THAN 3:30 P.M., LOCAL PREVAILING TIME ON November 9, 2001, at one of the following addresses:

If hand-delivered or delivery service

Contracting Officer
National Institute of Mental Health
Contracts Management Branch
6001 Exec. Blvd., Rm. 6107, MSC 9603
Rockville, MD 20852-9603

If using U.S. Postal Service

Contracting Officer
National Institute of Mental Health
Contracts Management Branch
6001 Exec. Blvd., Rm. 6107, MSC 9603
Bethesda, MD 20892-9603

Questions concerning any areas of uncertainty, which in your opinion, require clarification or correction, must be furnished in writing (Fax or e-mail is also acceptable) to Robert D. Barnie, and marked "Offeror's Questions, RFP No. NIMH-01-DN-0018".

ANY DISCUSSION OF THIS RFP WITH ANY INDIVIDUAL(S) OUTSIDE THE CONTRACTS MANAGEMENT BRANCH, NIMH, MAY RESULT IN DISQUALIFICATION OF THE OFFEROR AND REJECTION OF ANY PROPOSAL SUBMITTED.

Sincerely,

/s/

Robert D. Barnie, Contracting Officer
Contracts Management Branch, ORM
National Institute of Mental Health, NIH

Attachments: 1-7

Statement of Work

TITLE: Mouse Neuroscience Phenotyping and Distributing Center

I. Background

With the elucidation of the complete draft sequence of the human and other mammalian genomes, the next challenge is to conduct large-scale functional analyses of these genomes to greatly enhance our understanding of neurobiology. The laboratory mouse plays a pivotal role in human functional genomics, insofar as mouse strains carrying mutations have provided useful models for human diseases. RFA MH-99-007, "Mouse Mutagenesis and Phenotyping: Nervous System and Behavior" was issued in 1999 to establish neuroscience-focused facilities for large-scale, efficient, whole-genome mutagenesis, in order to promote the systematic and comprehensive functional analysis of neurobiological and behavioral phenotypes in the mouse. Cooperative agreements for three large-scale mutagenesis and phenotyping facilities that focus on abnormalities in nervous system function and behavior (MH61915: PI, Joseph Takahashi at Northwestern University; U01 MH61971: PI, Daniel Goldowitz at University of Tennessee, Memphis; U01 NS41215: PI, Wayne Frankel at Jackson Laboratory) were funded under the RFA, by NIMH and six other NIH institutes (NINDS, NIDCD, NEI, NIA, NIAAA, NIDA). A major goal of this initiative is to provide the scientific community with new research resources, i.e., mutant animals, in a timely fashion.

The expected production of mutants generated by the three neuroscience-focused mutagenesis facilities exceeds the capacity of existing mouse storage and distribution facilities. In order to realize the full potential for the scientific community of mutants produced in the three mutagenesis facilities, NIMH shall establish a large-scale phenotyping and distribution 'virtual' center. This virtual center shall be comprised of a network of investigators with expertise in different phenotypic domains, database/bioinformatics experts who can construct a state-of-the-art database in response to the needs of the neuroscience and behavioral communities, and adequate capacity to maintain and distribute mutant strains. The specific functions to be performed by this virtual center include: (1) confirmatory phenotyping of various nervous system functions and complex behaviors in mutant mice received from the three mutagenesis facilities; (2) maintenance of mutant strains as live animals, and cryopreserved materials (embryos or ovaries and sperm); (3) wide distribution to the scientific community of mutant strains in a very timely fashion; and (4) development and curation of a public database of neuroscience-relevant phenotypic information from mutant strains.

II. Purpose and Objectives

The purpose of this contract is to provide a mechanism by which mutant mouse strains produced under the three mutagenesis facilities, and the phenotypic information to characterize them, are widely distributed to the scientific community. The contract shall also support the development and curation of one database of neuroscience-relevant phenotypic information that characterizes these mutant strains.

NOTE TO OFFERORS – THE NIMH RECOGNIZES THAT IT MAY BE NECESSARY FOR TWO OR MORE ORGANIZATIONS TO TEAM TOGETHER IN ORDER TO SUBMIT A PROPOSAL THAT WILL MEET ALL OF NIMH'S OBJECTIVES UNDER THIS REQUIREMENT.

NIH will make a Determination of Exceptional Circumstances (DEC) to eliminate the potential for patents on mutant mice and cryopreserved materials that would undermine the development of a widely available national resource, which is a fundamental programmatic aim of the three mutagenesis facilities. The determination by NIH of exceptional circumstances justifying the restriction or elimination of the rights of the Contractor to retain title to subject inventions applies exclusively to mutant animals and the sperm and embryos (or ovaries) from which they are created.

A. Requirements Summary

The Contractor shall receive, maintain, phenotype or genotype (as necessary for mutant animal identification), and widely distribute to investigators in the scientific community mutant strains produced by the three large mutagenesis facilities referenced above. A database of neuroscience-relevant phenotypic information, determined from these mutant strains, will be developed and curated as a widely accessible resource for the scientific community. Specific research activities to be performed by the Contractor under this contract shall include the following:

- I. Store and distribute breeder mutant mice, as well as cryopreserved embryos (or ovaries) and sperm, produced by the three mutagenesis facilities. High-quality animal care, support services, and laboratory procedures shall be utilized to maintain specific pathogen free (SPF) living animals and cryopreserved materials.
- II. In order to identify animals with a given mutation, the Contractor shall have the capacity to genotype animals, for those mutations that have been mapped previously by the three mutagenesis facilities. The Contractor shall receive from the three mutagenesis facilities mapping information.
- III. In order to identify animals with mutations, the Contractor shall conduct neuroscience-relevant confirmatory phenotyping for those mutations that have not been mapped by the three mutagenesis facilities. The Contractor shall utilize the same phenotyping assays employed by the mutagenesis facility (see Task XI) to identify the mutant.
- IV. Cryopreserve sperm and embryos (or ovaries) from live SPF animals produced by the three mutagenesis facilities, as directed by the GPO, for purposes of wide distribution of cryopreserved materials to the scientific community.
- V. Derive viable live SPF animals from cryopreserved sperm and embryos (or ovaries).
- VI. Assure that live animals and cryopreserved sperm and embryos (or ovaries) received from and produced by the three mutagenesis facilities are SPF and were obtained from SPF animals, respectively.
- VII. Within six months of contract award, complete a requirements analysis prior to the construction of a single comprehensive database of diverse mouse phenotypic information. This analysis shall be used to gather information regarding targeted users, specific data to be included, which biological databases to link with, and required retrieval tools employed across multiple databases that would best serve users.
- VIII. Based on information gathered from the requirements analysis, construct and curate a single comprehensive database of neuroscience- and behavior- relevant phenotypic information on mutant strains generated by the three mutagenesis facilities.

- IX. Construct a web interface for use by neuroscientists and behavioral scientists with limited bioinformatics expertise, and develop highly efficient algorithms for querying the database that will permit these users to readily identify mutant animals on the basis of multiple phenotypic domains.
- X. Distribute SPF mutant strains, sperm, and embryos (or ovaries) received from the three mutagenesis facilities and make phenotypic data available to the scientific community, in a rapid, cost-effective, and efficient manner. Within one month of contract award the GPO will provide the Contractor with criteria for determining who receives access to mutant strains.
- XI. Conform to the terms and conditions of a DEC, which must be in place before the Contractor can conduct any work involving mutant strains, sperm, and embryos (or ovaries) received from the three mutagenesis facilities. The DEC shall be used to restrict or eliminate the rights of the Contractor to retain title to subject inventions as applied exclusively to mutant animals and the sperm and embryos (or ovaries) from which they are created.

B. The Contractor's Specific Major Responsibilities

- I. Work collaboratively with the three mutagenesis facilities to: 1. receive breeder mutant SPF mice (C57BL/6J strain or animals from mixed backgrounds, derived mostly from cross breeding with B6 and C3Hf/R1 strains); 2. cryopreserved sperm, embryos (or ovaries); 3. information on the heritability of phenotypes; 4. phenotypic data; and 5. genotypic data (mapping information).
- II. Assure that live animals and cryopreserved sperm and embryos (or ovaries) received from the three mutagenesis facilities are SPF or were obtained from SPF animals, respectively. This shall be accomplished by using standard testing procedures of a small number of animals on a random and routine basis, as directed by the GPO.
- III. Work collaboratively with the three mutagenesis facilities to receive mapping data, phenotyping assays, protocols, and appropriate training in the use of these assays.
- IV. Within six months of the contract award, complete a requirements analysis prior to the construction of a single comprehensive database of diverse mouse phenotypic information.
- V. Based on information gathered from the requirements analysis, construct and curate a single comprehensive database of neuroscience-relevant phenotypes determined from mutant strains received from the three mutagenesis facilities. This database shall include, in a format that permits rapid and efficient access, comprehensive phenotypic data, mapping information, heritability information, about the assay used, and a standardized protocol for its use.
- VI. Construct a web interface for use by neuroscientists and behavioral scientists with limited bioinformatics expertise, and develop highly efficient algorithms for querying the database that will permit these users to readily identify mutant animals on the basis of multiple phenotypic domains.

- VII. Create and maintain a Web site displaying information regarding which mutant mice are currently available for distribution.
- VIII. The Contractor shall cryopreserve sperm and embryos (or ovaries) from live SPF animals received from the three mutagenesis facilities, as directed by the GPO, for purposes of wide distribution of cryopreserved materials to the scientific community.
- IX. Ship mutant strains to researchers in the scientific community. Within one month of contract award the GPO will provide the Contractor with criteria for determining who receives access to mutant strains. The Contractor shall distribute SPF mutant strains, sperm, and embryos (or ovaries) received from the three mutagenesis facilities and make phenotypic data available to the scientific community, in a rapid and highly cost-effective manner. All SPF animals, sperm, and embryos (or ovaries) will be shipped to assure viability. All researchers receiving mutant strains shall be required by the Contractor to abide by the terms and conditions of a Materials Transfer Agreement (MTA) developed in consultation with the GPO.
- X. Derive viable live SPF animals from cryopreserved sperm and embryos (or ovaries).
- XI. Maintain an electronic database (see Task XVI) containing detailed information for all shipments of animals and cryopreserved material to investigators. This will minimally include the investigator's e-mail address, telephone number, fax number, mailing address, and specific mutant strains or cryopreserved material that were sent.
- XII. Phenotype complex behaviors in mutant strains for which mutations have not been mapped by the three mutagenesis facilities. This shall be accomplished by utilizing the same phenotyping assays employed by the mutagenesis facility to identify mutant animals (see Task XI below).
- XIII. Conduct genotyping with suitable flanking markers, for those mutant strains that have been mapped to modest resolution (within ~30 cM) by the three mutagenesis facilities. The Contractor shall receive from the three mutagenesis facilities mapping information.
- XIV. The Contractor shall not use data, mutant strains, sperm, and embryos (or ovaries) for any purpose, other than that specified in this contract, without written approval of the GPO.

NOTE TO OFFERORS – FIXED UNIT PRICES SHALL BE NEGOTIATED AND APPLY TO THE FOLLOWING TASKS:

Tasks II – III, VIII – X:	Receipt, Storage, Care, and Distribution of Mutant Mouse Strains (Live Animals). This shall also include costs for failures of expansion of breeding pairs or cryopreservation, breeding pair quality control, and tracking of animals
Task IV:	Receipt, Storage, Distribution of Embryos and Sperm
Tasks V, VII:	Cryopreservation of Embryos (or Ovaries)
Task V:	Sperm Cryopreservation
Task VI:	Derivation of Live Animals
Task XI:	Phenotyping of Mutant Strains

III. Services to be Performed

A. General Requirements

- I. The GPO, whose position is defined in Section G of the contract, shall monitor all work under the contract.
- II. Independently, and not as an agent of the Government, the Contractor shall furnish all necessary labor, services, equipment, materials, and supplies (except as otherwise specified herein) and perform the work set forth below.

B. Specific Requirements

The contractor shall conduct all aspects of the contract, as specified in the tasks listed below.

I. Task I: Employment of a Pricing Schedule

- i. A fixed price schedule shall be employed under this contract that specifies a price per mutant strain and includes all expenses (direct and indirect) related to the receipt, maintenance, and shipment of mutant mouse strains, embryos (or ovaries), and sperm, and the phenotyping of mutant mouse strains. This schedule, found in Section B of the contract, includes prices for the following activities, for the following number of strains (minimum, expected, maximum):
 - a. Care/maintenance/distribution of mutant strains: live animals (see Tasks II-III and VIII-X below) – Base Year 1: 50, 75, 125; Option Year 1: 50, 75, 125; Option Year 2: 50, 75, 125; Option Year 3: 50, 75, 125; Option Year 4: 50, 75, 125; Option Year 5: 50, 75, 125.
 - b. Embryo/sperm storage (see Task IV below) – Base Year 1: 50, 75, 125; Option Year 1: 200, 225, 275; Option Year 2: 350, 375, 425; Option Year 3: 500, 525, 575; Option Year 4: 650, 675, 725; Option Year 5: 650, 675, 725.
 - c. Embryo (or ovary) cryopreservation (see Tasks V and VII below) – Base Year 1: 50, 75, 125; Option Year 1: 100, 150, 225; Option Year 2: 100, 150, 225; Option Year 3: 100, 150, 225; Option Year 4: 100, 150, 225; Option Year 5: 0, 0, 0.

- d. Sperm cryopreservation (see Task V below) - Base Year 1: 50, 75, 125; Option Year 1: 100, 150, 225; Option Year 2: 100, 150, 225; Option Year 3: 100, 150, 225; Option Year 4: 100, 150, 225; Option Year 5: 0, 0, 0.
- e. Derivation of live animals (see Task VI below) – Base Year 1: 10, 15, 30; Option Year 1: 10, 15, 30; Option Year 2: 10, 15, 30; Option Year 3: 10, 15, 30; Option Year 4: 10, 15, 30; Option Year 5: 10, 15, 30.
- f. Phenotyping of mutant strains (see Task XI below) - Base Year 1: 100, 150, 225; Option Year 1: 100, 150, 225; Option Year 2: 100, 150, 225; Option Year 3: 100, 150, 225; Option Year 4: 100, 150, 225; Option Year 5: 50, 75, 125.
- ii. Work performed under Tasks XII – XVII shall be reimbursed on a cost basis.

II. Task II: Receipt, Distribution of Mutant Mouse Strains (Live Animals)

- i. The Contractor shall receive from the three mutagenesis facilities SPF breeding pairs and breed up live animals in sufficient quantities to distribute mutant strains to the scientific community. Approximately 75 mutant strains in the first year and in each of the subsequent option years are expected to be maintained as live animals (see Task I above).
- ii. The individual mutant strains to be maintained as live animals, as well as the number of strains maintained as live animals, may vary from one contract year to the next, and shall be determined by the GPO.
- iii. The Contractor shall assure that live animals and cryopreserved materials received from the three mutagenesis facilities are SPF or were obtained from SPF animals, respectively. This shall be accomplished by employing standard testing procedures on a small number of animals on a random and routine basis, as directed by the GPO.
- iv. It is anticipated that all mutant strains received from the three mutagenesis facilities will be SPF. In the unusual circumstance where testing reveals a strain to be contaminated, the Contractor shall rederive SPF stock from non-SPF animals by mating non-SPF animals to produce blastocysts for transplantation into SPF hosts in the Contractor's SPF facility. Matings will be synchronized through superovulation and the process of embryo transfer will be completed in a timely manner. Recipient shall conduct standard testing to insure that these animals are SPF.
- v. The Contractor shall distribute to the scientific community SPF mutant strains within 1 month of receipt of payment (see Task XV).

III. Task III: Storage and Care of Mutant Strains (Live Animals)

- i. The Contractor shall provide for the care and welfare of mice in accordance with all federal, state, and local laws.

- ii. The Contractor shall obtain local Institutional Animal Care and Use Committee (IACUC) approval and adhere to the responsibilities and requirements of live animal care as specified in:
 - a. Animal Welfare Act as amended (7 USC, 2131-2156) (<http://www.nal.usda.gov/awic/legislat/usdaleg1.htm>) .
 - b. Health Research Extension Act of 1985, P.L. 99-158 (<http://grants.nih.gov/grants/olaw/references/hrea1985.htm>) .
 - c. Guide for the Care and Use of Laboratory Animals (<http://oacu.od.nih.gov/regs/guide/guidex.htm>) .
- iii. The Contractor's animal care facility shall be accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC; <http://www.aaalac.org/>) .
- iv. The Contractor's facility shall have a barrier system and be certified by a veterinarian as being specific and pathogen free (SPF) on the basis of the absence of common pathogens, e.g., mouse hepatitis virus.
- v. The Contractor shall follow standard operating procedures consistent with all federal, state, and local laws in the care of live animals. The following services shall be provided by a trained animal technician(s):
 - a. Twice daily health checks on all animals and treatment, as required, of sick animals or animals with undesirable microorganisms such as ectoparasites or nematodes.
 - b. Quality control/health/environmental monitoring.
 - c. Performing veterinary technical support services as needed on all animals to include:
 - 1. physical examinations;
 - 2. restraint;
 - 3. Calculation of dosages and administration of oral or parenteral drugs;
 - 4. Routine phlebotomy;
 - 5. Surgical support;
 - 6. Specimen collection and routine parasite detection procedures;
 - 7. Routine clinical treatments as prescribed by a veterinarian, including diagnostic procedures, injections (IM, SQ, IP, IV), shipments of specimens to lab, receipt and reporting of lab results, etc;

8. Applying method of identification to individual animals as per standard operating procedures (e.g., tattoo, ear punch or implantable transponders); and
 9. Other animal health support services as are required.
- d. The Contractor shall record and enter data regarding animal care and colony management in a computerized database.
 - e. The Contractor shall provide research technical support for transgenic and research mouse breeding colonies. The contractor employee providing this technical support shall have specialty experience in breeding rodent strains/stocks and shall have completed or passed a college level course on genetics. Examples of the types of tasks in this category which the contractor will be responsible for include:
 1. Performing special husbandry and/or management requirements for transgenic colonies (mice) including vasectomizing male mice, as needed, preparing the donor and recipient females by coordinating their matings with the appropriate normal and vasectomized males, superovulate female donors, when indicated, identify after mating female normal mice with plugs, care for potential transgenic births, determine their sex and wean them when appropriate, provide animal identification, i.e., ear notch, tail tattoo or transponder, as indicated.
 2. Notifying investigators of the need to order mice of the appropriate strain and sex, screening animals as they arrive to establish they are of the correct sex and that animals of different sexes have not been unintentionally mixed.
 3. Labeling each cage with information regarding the strain or lineage, sex and sexual status (i.e., vasectomized male, plugged female donor or recipient, etc.) of the mice and of updating this label. A calendar will be kept recording the date of birth of each animal. The contractor shall also enter data into a computerized database to maintain pedigree information on each animal.
 4. Keeping current computerized records of animal age and fertility data on all males and females (in terms of number of live pups born and weaned). This includes disposing of males incapable of successfully breeding.
 5. Checking each animal twice daily as standard operating procedures to assess health status, identify potential illnesses, death, bred (plugged) females, wet bedding and other routine care.
 6. Employing standard operating procedures, perform aseptic techniques for microisolator cage housing of mice. This includes use of autoclaved water, food and bedding for each cage, gloved hands and forceps shall be rinsed with chlorinated or other appropriate disinfectant/sterilant prior to

moving any animal in cage changing within laminar flow hood, and wiping down the hood after every use with disinfectant/sterilant.

- vi. The Contractor shall have available at least three animal care personnel who can be contacted 24 hours per day, 365 days per year in case of an emergency. The Contractor shall also have available backup emergency coverage for the veterinarian, 24 hours per day, 365 days per year, including a Laboratory Animal Medicine Board certified veterinarian with clinical medical experience treating mice.
- vii. The Contractor shall be responsible for receiving incoming animals from the three mutagenesis facilities; checking deliveries against orders; performing physical inspection of containers and animals; moving animals to appropriate rooms and placing them in cages; and quarantining animals if necessary as specified in the Contractor's standard operating procedure.
- viii. The Contractor shall be responsible for the daily feeding and watering of all animals housed in the facility and maintenance of records of all feeding and watering, except for animals formally exempted by the IACUC. This includes use of appropriate laboratory diets.
- ix. The Contractor shall be responsible for the daily handling and restraint of rodents for animal health and husbandry purposes.
- x. The Contractor shall be responsible for keeping the animal facilities and support spaces clean and free of contaminants; changing contact and noncontact bedding; washing and sanitizing cages, racks and associated animal equipment; and coordinating activities with pest control personnel. The Contractor shall dispose of animal wastes from the animal housing rooms and the rest of the facility on a daily basis in plastic bags to designated outdoor receptacles. The Contractor shall dispose of animal carcasses in accordance with all existing federal, state, and local statutes and regulations.
- xi. The Contractor shall ensure that management procedures within the animal rooms, storage and other areas do not encourage the harborage of vermin. The Contractor shall insure the provision of integrated pest management (IPM) services to their animal facilities and associated animal testing areas, as per specifications within the Contractor's standard operating procedure.
- xii. The Contractor shall maintain SPF conditions and shall maintain and distribute live animals under SPF conditions. This shall include use of a barrier facility. Veterinarian certification of SPF conditions shall be provided to the GPO.
- xiii. The Contractor shall use bar codes or other comparable methods for tracking animals and maintaining an up-to-date inventory.
- xiv. The Contractor shall maintain an animal research facility that has controlled access and is limited to contract staff with official duties in the animal research program. Only official visitors escorted by appropriate contract staff shall be permitted into the animal research facility. The Contractor shall assure that all

contract staff are aware of the importance of maintaining security in the animal facilities and that appropriate safeguards are followed.

- xv. The Contractor shall provide an occupational health plan for personnel hired to perform contract services with animals. The program shall include, at a minimum, the following:
 - a. Any employee performing research service or animal care under this contract shall be actively participating in an Occupational Health and Safety Program. The pre-employment fitness to work examination should include: 1) spirometry to assess pulmonary function, 2) audiogram for personnel working in cage wash or other areas of elevated noise, and 3) illicit drug or alcohol screen to establish a drug-free workplace.
 - b. Tetanus vaccination within the last ten years; current measles, mumps and rubella (MMR) vaccination and smallpox vaccination, and hepatitis-B vaccination.
 - c. All certifying physicians must have written instructions supplied by the contractor containing the items outlined above prior to their certification.
- xvi. The Contractor shall establish and adhere to a written Quality Control Program (QCP) to ensure that a high level of quality is maintained. This program shall include, but not be limited to:
 - a. An inspection system covering all the services listed in the Statement of Work;
 - b. Methods of identifying poor performance in the services being provided before the level of performance becomes unsatisfactory; and
 - c. Methods to ensure the Contractor staff do not introduce human and animal pathogens that may be transmitted to the animal population and to ensure the Contractor activities do not risk cross-contamination.

IV. Task IV: Receipt, Storage, and Distribution of Cryopreserved Materials

- i. The Contractor shall receive from the three mutagenesis facilities embryos (or ovaries) and sperm for approximately 150 mutant strains in the base year and in each of the five option years. Embryos or ovaries shall be cryopreserved and stored under SPF conditions in which maximal viability is retained. On average the Contractor shall distribute SPF cryopreserved materials within 1 week of receipt of payment.
- ii. The Contractor shall assure that cryopreserved materials received from the three mutagenesis facilities are SPF or were obtained from SPF animals, respectively. This shall be accomplished by derivation of live animals from said materials, and testing for SPF status. This shall be accomplished on a small number of animals on a random and routine basis, as directed by the GPO.

- iii. Cryopreserved materials shall be stored to assure their viability for deriving live SPF animals.
- iv. Cryopreserved materials shall be maintained in sufficient quantities to permit distribution to multiple researchers in the scientific community.

V. Task V: Cryopreservation of Sperm, Embryos (or Ovaries)

- i. The Contractor shall cryopreserve sperm and embryos (or ovaries) from live SPF animals received from the three mutagenesis facilities, as directed by the GPO, for purposes of wide distribution of cryopreserved materials to the scientific community.
- ii. Cryopreserved materials shall be stored to assure their viability for deriving live SPF animals. NOTE: The GPO shall determine which mutant strains are to be maintained as cryopreserved material.
- iii. Cryopreserved materials shall be maintained in quantities to permit distribution to multiple researchers in the scientific community.

VI. Task VI: Derivation of Live Animals

- i. As directed by the GPO, the Contractor shall derive live animals from cryopreserved sperm and embryos (or ovaries), for the purpose of distribution of live animals to the scientific community. It is expected that this shall occur for a small number (15% or less) of mutant strains per contract year.
- ii. The time to derive live animals is dependent on multiple factors. It is expected, however, that the average time for derivation shall be 6 months.
- iii. The derivation of live animals shall be performed in a timely manner, and may be directed by GPO or may occur in response to requests from researchers who desire live animals for given mutant strains. If derivation is requested by a researcher requesting a mutant strain, the Contractor shall not proceed with the derivation until the requestor has paid and the contractor has received 50% of the access fees. Animals shall not be distributed in such circumstances until payment in full (100% of access and shipping fees) is received.

VII. Task VII: Alternative Approaches to Embryo Cryopreservation

- i. Where feasible, in order to reduce costs or effort, the Contractor shall utilize alternative approaches to embryo cryopreservation (e.g., cryopreservation of ovaries) to derive live animals.
- ii. The Contractor shall demonstrate the efficiency and success of such alternative approaches for deriving viable live animals.
- iii. The Contractor shall have the capacity to distribute alternative cryopreserved materials to the scientific community, for the purpose of deriving a live, viable

animal. As requested by the GPO, the Contractor shall derive live animals from said material in a reasonable time frame.

VIII. Task VIII: Failures of Expansion of Breeding Pairs or Cryopreservation

- i. In the event of a failure to expand breeding pairs or to cryopreserve embryos (or ovaries) and sperm, the Contractor shall electronically notify the GPO at the time of occurrence and in the monthly progress report, and shall make a request for additional animals from the appropriate mutagenesis facility.
- ii. Any problems in the Contractor's protocols that are responsible for failure of the tasks listed above shall be detected and corrected as rapidly as possible. The Contractor shall closely monitor its efficiency rate.

IX. Task IX: Breeding Pair Quality Control

- i. The Contractor shall maintain breeding pairs of mutant mice SPF using procedures that ensure freedom from contamination.
- ii. The Contractor shall maintain a suitable back-up facility (this need not be a separate building but must include separate storage facilities and power source) for storage of an adequate number of cryopreserved strains as a safeguard against the accidental loss of this valuable collection. Materials will be stored at both sites for the life of this contract, and prepared for transfer to any subsequent contractor at the expiration of this contract. All contract provisions applying to the use and handling of live animals and cryopreserved materials in the contractor's facility shall apply to biomaterials stored at the back-up facility.

X. Task X: Tracking of Animals, Cryopreserved Materials

- i. The Contractor shall efficiently track all animals and cryopreserved materials by using a bar coding and animal 'Chip ID' system.
- ii. A unique ID number shall be assigned to each strain, and shall be linked to phenotypic information in the database to facilitate rapid accessibility to mutant strains and their phenotypic information.
- iii. The Contractor shall document error rates for mix-ups and misclassification of animals and cryopreserved materials. If the error rate exceeds 0.05%, the Contractor shall take appropriate and immediate action to reduce the error rate to 0.05% or less.

XI. Task XI: Phenotyping of Mutant Strains

- i. In order to identify animals with mutations that have not been mapped, the Contractor shall conduct neuroscience-relevant confirmatory phenotyping for those mutations that have not been mapped by the three mutagenesis facilities. The Contractor shall utilize a battery comprised of the same phenotyping assays employed by the mutagenesis facility, as described in (ii) below, to identify the mutant strain.

- ii. The Contractor shall rely on a broad range of assays to assess multiple phenotypic domains. Specific primary domains that influence nervous system function and complex behavior include motor function, seizure threshold, hearing and vision impairments, neural origins of obesity, learning and memory (as assessed by a fear-potentiated startle test and by fear conditioning), taste, auditory function, visual function, nociception, olfaction, abused drug response, alcohol response, social behavior, aging, circadian rhythmicity, and neuroendocrine function (hypothalamic-pituitary-adrenal and hypothalamic-pituitary-thyroid axes).
- iii. The Contractor shall employ the following specific assays, and other tests as specified by the GPO, to assess mutant strains neuroscience-relevant phenotypic domains:
 - a. Motor function – rotorod test; grip strength.
 - b. Seizure threshold – electroconvulsive threshold.
 - c. Hearing impairments – acoustic startle response; prepulse inhibition; fear-potentiated startle.
 - d. Vision impairments – dysmorphology surveys; electroretinography; eye size; structure immunohistochemistry; visual evoked potentials; Fundus photography.
 - e. Learning and memory – fear potentiated startle; conditioned fear response (context-dependent and cued).
 - f. Taste and olfaction – two-bottle and “buried food” test.
 - g. Abused drug response – locomotor activity; novelty seeking; novel food neophobia.
 - h. Alcohol response – ethanol-induced alterations in locomotor activity; two-bottle choice test; loss of righting reflex.
 - i. Social behavior - sexual, reproductive, and parenting behaviors; aggression/intruder test.
 - j. Aging - morbidity and mortality; behavioral and pathological changes with aging.
 - k. Circadian clock function - locomotor activity rhythms.
 - l. Neuroendocrine function - corticosterone and TSH assay; behavioral tests (open field behavior, elevated plus maze).

XII. Task XII: Genotyping Animals (Mapped Mutant Strains)

- i. In order to breed animals for distribution, progeny need to be evaluated to establish whether they are transmitting a given mutation. If the mutation has been mapped by one of the three mutagenesis facilities, phenotyping will not be required. In these circumstances, the Contractor shall identify animals carrying mutations by genotyping with suitable flanking markers.
- ii The Contractor shall receive mapping information (with modest resolution) from the three mutagenesis facilities.
- iii The Contractor shall link such mapping data to phenotypic information contained in the database to be constructed and curated as part of this contract (see Task XIV below).

XIII. Task XIII: Requirements Analysis

The Contractor shall conduct and complete, within 6 months of contract award, a requirements analysis that will be used to gather information from intended users of a comprehensive database of neuroscience-relevant phenotypes. The main objectives of the requirements analysis is to collect information related to the requirements, specifications, and organization of a database of neuroscience- and behavior - relevant mouse phenotypic information on mutant strains, which will be widely accessible and utilized by the neuroscience and behavioral scientific communities. Prior to conducting the requirements analysis the Contractor shall work with the GPO in identifying what information needs to be collected, targeted users of the database, and members of the scientific community to include in the requirements analysis. At a minimum the data to be collected from the requirements analysis shall include but not be limited to the following: (1) what information needs to be included in the database; (2) other biological databases with which to link; and (3) parameters for retrieval tools across multiple databases that would best serve users. In conducting the requirements analysis the Contractor shall develop draft instruments (questionnaire, forms, surveys) to be used to collect the required information. These instruments shall be submitted to the GPO for review and comment within 1 month of contract award. The draft instruments shall be designed to illicit a narrative response as opposed to a fill in the blank, multiple choice or yes or no type response. The GPO shall review, comment on, and approve the draft instruments within 6 weeks of contract award. The finalized instruments, to be used in conducting the research analysis, shall reflect all changes and recommendations made by the GPO. Within 6 months of contract award, the Contractor shall conduct the requirements analysis, receive narrative responses, analyze the data, and make a recommendation to the GPO regarding how the database is to be constructed.

XIV. Task XIV: Construction and Curation of a Single Database

- i. The Contractor shall construct and curate a single database of neuroscience-relevant phenotypic information collected on mutant strains produced by the three mutagenesis facilities.
- ii. The requirements, specification, and organization of the database shall be determined from the requirements analysis conducted by the Contractor.

- iii. The database shall be constructed to be publicly accessible to the neuroscience and behavioral communities, many members of whom have limited bioinformatics skills.
- iv. The Contractor shall link this database to other existing databases of biological information (e.g., genomic sequence, proteomics) relevant to mammalian biology, and with comparable databases for other model systems (e.g., drosophila, *C. elegans*).
- v. The Contractor shall construct a web interface useful to neuroscientists and behavioral scientists with limited bioinformatics expertise, and develop highly efficient algorithms for querying the database that will permit these users to readily identify mutant animals on the basis of multiple phenotypic domains.
- vi. The Contractor shall develop highly efficient bioinformatics algorithms and search engines for rapidly and efficiently querying the database. These algorithms and search engines shall permit search and retrieval of strains that display abnormalities in one or more specific neuroscience- and behavior- relevant phenotypic domains, and shall also permit the rapid and efficient identification of phenotypes determined by a complex set of quantitative rules (i.e., intact vision and sensory function but abnormal learning/memory and social behavior).

XV. Task XV: Applicable Fees and Distribution Procedures Pertaining to Live Animals, Cryopreserved Materials

- i. Within one month of contract award, the Contractor shall receive from the GPO criteria for determining who receives access to mutant strains. The Contractor shall apply these criteria and only ship live animals and cryopreserved materials to researchers in the scientific community who meet these criteria .
- ii. The Contractor, in consultation with the GPO, shall develop within one month of contract award a MTA for distribution of mutant strains and cryopreserved materials. The MTA is subject to approval by the GPO.
- iii. The Contractor shall require all researchers receiving mutant strains to abide by the terms and conditions of the MTA.
- iv. No live animals or cryopreserved materials shall be released by the Contractor unless the researcher agrees to the terms and conditions of the MTA. The Contractor shall only provide live animals and cryopreserved materials to a recipient biomedical research institution for use by a designated principal investigator in a scientific research project. These materials shall not be provided to individuals.
- v. The GPO retains the right to modify existing access criteria and the MTA.
- vi. Within one month of contract award the GPO, in consultation with the Contractor, shall establish a schedule of fees to be charged by, and payable to, the Contractor for access to and distribution of mutant strains. Fees shall be charged to

researchers in the scientific community who seek to obtain from the Contractor live animals and cryopreserved materials.

- vii. Fees charged by the Contractor shall include access and usage fees and all shipping charges. All requests to waive access and shipping fees shall be forwarded to the GPO for approval or denial. Income received from fees charged for distributing mutant strains shall be utilized to offset contract costs. The Contractor shall be responsible for the collection of any income so generated, and such income shall be paid directly to the Contractor in the form of a check. The Contractor shall handle the accounting procedures involved and maintain a separate record of all income collected. All income generated shall be reflected on the Contractor's invoice and in the Monthly Report for the month in which the income is received. Each invoice shall include a credit line to reflect any income generated during the invoiced period. The Contractor shall not release any live animals or cryopreserved materials without first being paid in full.
- viii. The Contractor shall package and ship live animals and cryopreserved materials in accordance with all applicable federal, state, and local laws, regulations, and requirements. Live animals and cryopreserved materials shall be shipped in a way that shall ensure their viability when received by the recipient.
- ix. The Contractor shall strive to distribute mutant strains in a manner that meets the needs of individual requestors. This may entail the shipment of live animals maintained on the shelf, shipment of cryopreserved sperm and embryos (or ovaries), or derivation of live animals from cryopreserved materials. The Contractor shall establish a publicly accessible timeline under which requestors shall receive the requested material and when the requestor shall receive live animals that the Contractor derives from cryopreserved materials.

XVI. Task XVI: Database of Information on Resource Utilization

- i. The Contractor shall maintain an accurate database of requestors receiving the biomaterials distributed to investigators. The database shall minimally include the requestor's name, institution affiliation, email, telephone number, fax number, and email address; the date of request to the Contractor; the mutant strain shipped and in what form (live animals or cryopreserved materials); and the date fees were received by the Contractor.
- ii. The Contractor shall maintain a database of the number of users accessing the database on a monthly basis, as well as any available information on said users (i.e., machine names, IP addresses, etc).

XVII. Task XVII: Other Activities

- i. As directed by the GPO, but prior to the contracts expiration date, the Contractor shall provide the GPO with a full inventory of mutant strains, including breeding pairs and cryopreserved materials and sperm produced during the course of this contract, and all information in the phenotypic database (including all search engines, retrieval algorithms, etc) shall be provided to the GPO and any successor contractor.

- ii. A detailed plan for the transfer of all materials to a storage facility or successor contractor shall be provided as directed by the GPO. If there is a successor contractor or if this function is to be taken over by the US Government, the contractor shall inform and assist the GPO or successor contractor in the transition and day-to-day operation to enable the successor to gain detailed working knowledge of procedures utilized in order to assure proper and successful transition.
- iii. If it is necessary to transfer the collection of mutant strains to a subsequent contractor or NIMH, this transfer shall occur within 30 calendar days of notification by NIMH. If directed by the GPO, the Contractor shall make all necessary arrangements to have the collection shipped in the freezers in which the Contractor has them stored and shall make arrangements to have the freezers returned to their facility after the transfer of the collection is completed.
- iv. Failure to effect said transfer within this time period stipulated in Task XVII, item iii above will result in the Contractor being assessed a daily charge of \$25,000.
- v. The Contractor may conduct independent analyses of mutant strains and phenotypic data received from the three mutagenesis facilities. However, any such activities are not a part of this contract and shall be performed at the Contractor's expense, and in conformance with all limitations imposed by the DEC.

OPTIONS

A. OPTIONS FOR ADDITIONAL SERVICES

The Government may, by unilateral contract modification, require the contractor to perform the following additional services, at the negotiated unit prices; provided the Government gives the Contractor a preliminary written notice of its intent to require the additional services at least two (2) weeks in advance.

- i. Starting in option year 1 and in each of the successive option years, if so directed by the GPO, the Contractor shall have expertise for the baseline phenotyping of inbred strains identified in the Jackson Laboratory's Mouse Phenome Project (see <http://aretha.jax.org/pub-cgi/phenome/mpdcgi?rtn=docs/recommendations> for the current recommendations) on neuroscience-relevant domains, as directed by the GPO. Neuroscience-relevant domains shall minimally include neural and sensory function; complex behavior; pharmacologic response; and imaging and electrophysiology. The Contractor shall have the capacity to accomplish this through expertise in the virtual facility or through the establishment of a network of mouse neuroscientists and behavioral scientists. All phenotypic Information collected from inbred strains shall be deposited into the database constructed by the Contractor under Task XIV of the SOW. This service (see Task XI) is to be reimbursed on a fixed price basis, for phenotyping all nine strains on each of the 4 phenotypic domains.
- ii. As directed by the GPO, the Contractor shall map mutations to a higher resolution than originally done by the three mutagenesis facilities, and shall breed mutations

into balanced and congenic stocks on specified genetic backgrounds for distribution to the scientific community. This service (see Task XII) is to be reimbursed on a cost basis, and is expected to occur for 5 strains in the base year and in each of the 5 option years.

B. OPTION TO EXTEND THE TERM OF THE CONTRACT

Unless the Government exercises its option pursuant to the Option Clause set forth below, the contract will consist only of one year of service. Pursuant to clause 52.217-9 set forth below, the Government may, by unilateral contract modification, require the contractor to perform one (1) additional year of service. The Government may exercise this Option up to five times. During these option periods the Contractor shall continue to fulfill the original objectives of the contract as set forth in Tasks II – XVII of the Statement of Work.

Option to Extend the Term of the Contract (Mar 2000)

- i. The Government may extend the term of this contract by written notice to the Contractor prior to the contract's expiration date; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- ii. If the Government exercises this option, the extended contract shall be considered to include this option clause.
- iii. The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

REPORTING REQUIREMENTS

A. GENERAL

- i. Within one month of contract award the Contractor shall provide to the GPO, in electronic format, a MTA to be employed for the distribution of live animals and cryopreserved materials.
- ii. Within 1 month of contract award the Contractor shall provide to the GPO, for review and approval, a draft copy of the instruments (questionnaires, surveys, forms) to be used in conducting requirements analysis (Task XIII).
- iii. Prior to the conduction of the requirements analysis, the Contractor shall provide to the GPO final copies of the instruments (questionnaires, surveys, forms) to be used in conducting the requirements analysis.
- iv. Within 6 months of contract award, the Contractor shall complete the requirements analysis and provide to the GPO its recommendation on how to construct the database (Task XIV).

- v. The Contractor shall provide to the GPO a URL for a functioning website by which investigators in the scientific community can access the database constructed under Task XIV, within 10 months of contract award.
- vi. The Contractor shall notify the GPO electronically that a functioning database of phenotypic information is available to investigators in the scientific community (see Task XIV), within 12 months of contract award.
- vii. Within two months of the contract award, the Contractor shall provide to the GPO, in electronic format, a timeline under which requestors shall receive live animals and cryopreserved materials. This also shall include the receipt of live animals which must first be derived from cryopreserved materials.
- viii. In the event of a failure to expand breeding pairs or to cryopreserve materials, the Contractor shall electronically notify the GPO at the time of occurrence and in the monthly progress report, and shall make a request for additional animals from the appropriate mutagenesis facility.
- ix. The Contractor shall provide to the GPO a copy of its IACUC approval within one month of contract award.
- x. The Contractor shall provide to the GPO a copy of its certification of SPF status within one month of contract award.
- xi. The Contractor shall provide to the GPO a copy of its AAALAC certification within one month of contract award.
- xii. The Contractor shall notify the GPO electronically of all results of testing animals and cryopreserved materials for SPF status, at the time such testing is completed.
- xiii. The Contractor shall notify the GPO electronically of all results of efforts to derive live animals from cryopreserved materials, at the time such efforts are completed.

B. MONTHLY REPORT

The Contractor shall submit a Monthly Report to the GPO and the CO. The format for this report shall be established within one month of contract award after collaboration with the GPO. The report shall be submitted on a password-protected site on the World Wide Web and shall include the following:

- i. The number of mutant strains received during that month, and in what form (live animals or cryopreserved materials).
- ii. The phenotypic abnormalities exhibited by each mutant strain received during the month, as reported by the mutagenesis facility that produced the mutant strain. This shall include which assay(s) on which phenotypic abnormalities have been detected.

- iii. Information regarding which mutant strains received during the month were mapped (with modest resolution) by the mutagenesis facility that produced the strain.
- iv. Documentation regarding which mutant strains were shipped to investigators during that month, and in which form (live animals or cryopreserved materials), including the date that requests were received.
- v. A list of all researchers who received mutant strains, and in which form (live animals, cryopreserved materials).
- vi. Documentation regarding the form for which mutant strains were requested during the month, i.e., as live animals or cryopreserved material.
- vii. The Contractor's success rate during the month for deriving viable live animals from cryopreserved material, including the time line for such derivation.
- viii. Report of confirmation of SPF status of live animals and of animals derived from cryopreserved materials, as received from the three mutagenesis facilities during the month.
- ix. Income from access fees and distribution charges received during the month, indexed by investigator and mutant strain.
- x. The number of users accessing the phenotypic database during the month, as well as any available information on said users (i.e., machine names, IP addresses, etc).
- xi. Any problems encountered and how they were (or will be) resolved.
- xii. Identify and describe any factors having a cost implication and recommendations for resolution.

C. DATABASE OF DISTRIBUTED BIOMATERIALS

The Contractor shall maintain an accurate database of requestors receiving the biomaterials distributed to investigators who receive biomaterials. The database shall minimally include the requestor's name, institution affiliation, email, telephone number, fax number, and email address; the date of request to the Contractor; the mutant strain shipped and in what form (live animals or cryopreserved materials); and the date fees were received by the Contractor.

D. ANNUAL REPORT

A brief annual report shall be compiled to summarize the information contained in that year's monthly reports. An electronic file containing the information in the annual report shall be provided to the GPO and the CO.

E. FINAL INVENTORY OF MUTANT STRAINS

As directed by the GPO, but before contract expiration date, the Contractor shall provide in electronic format a full inventory of mutant strains, including breeding pairs and cryopreserved material during the course of this contract, and all information in the phenotypic database (including all search engines, retrieval algorithms, etc) shall be provided to the GPO and any successor contractor.

F. FINAL REPORT

A final report, including an executive summary of no more than three pages, shall summarize all of the activities conducted under this contract. A complete written final report shall be delivered to the GPO and the CO at the expiration date of this contract.

SPECIAL REQUIREMENTS

- i. The Contractor shall collect fees according to a fee schedule (see Task XV) established by the GPO in consultation with the Contractor. These fees shall be used as offset revenue against contract charges for the month in which the offset revenue was received.
- ii. The Contractor shall work in a collaborative, collegial, and interactive fashion with the three mutagenesis facilities.
- iii. Any and all phenotypic and genotypic data and mutant strains (including live animals and cryopreserved materials) received or generated under this contract are: 1. subject to the requirements a Determination of Exceptional Circumstances (DEC) , and 2. to be widely distributed to the scientific community.
- iv. As necessary, the Contractor shall fully cooperate with any successor contractor and NIMH to ensure the smooth and efficient transfer of all data and mutant strains in the possession of the Contractor at time of transfer.

ATTACHMENT 2 to STREAMLINED RFP No. NIMH-01-DN-0018**DELIVERABLES AND REPORTING REQUIREMENTS****1. DELIVERIES OR PERFORMANCE**

Performance of this contract shall begin on the effective date and shall not extend beyond the estimated completion date of contract unless the period is extended by modification to the contract.

2. DELIVERY SCHEDULE

- A. After the contract award date, the Contractor shall deliver the following items/reports to the GPO in accordance with the delivery schedule set forth below:

ITEM/DESCRIPTION	QUANTITY	DUE DATE
Material Transfer Agreement	Electronic	One month after contract award
Draft instruments for conducting requirements analysis	Electronic	One month after contract award
Finalized instruments for conducting requirements analysis	Electronic	Two months after contract award
Completion of requirements analysis	Electronic	Six months after contract award
Recommendation for constructing database	Electronic	Six months after contract award
URL for a functioning website to be used by investigators & scientific community to access the database constructed under Task XIV	Electronic	Ten months after contract award
Notification of the availability of a Functioning database of phenotypic information	Electronic	Twelve months after contract award
Timeline under which requestors shall receive live animals and cryopreserved materials	Electronic	Two months after contract award
Notification of a failure to expand Breeding pairs or to cryopreserve materials	Electronic	At time of occurrence and in Monthly Report
IACUC certification	One hard copy	One month after contract award
SPF certification	One hard copy	One month after contract award
AAALAC certification	One hard Copy	One month after contract award

Notification of results of testing Animals and cryopreserved materials for SPF status	Electronic	At time testing is completed
Notification of results of efforts to derive live animals from cryopreserved materials	Electronic	At time efforts are completed. Efforts shall be repeated until a live animal is obtained.
Monthly Report	Electronic	15 days after the close of the reporting period
Annual Report	Electronic	15 days after the close of the reporting period
Final inventory of mutant strains	Electronic	As directed by GPO but prior to contract expiration date
Final Report	Electronic	By contract expiration date

B. The items/reports identified above shall be addressed and delivered to the GPO in the quantities stated. The contractor shall be provided with the password-protected site on the World Wide Web where the Monthly Report is to be sent to both the GPO and the CO within one month of contract award. In addition, one copy of the Annual Report and one copy of the Final Report shall be delivered to the Contracting Officer by the specified delivery date. In the event that an Option is exercised to extend the contract period of performance an Annual Report in lieu of a Final Report shall be prepared and submitted by the Contractor. In the year that a Final Report is due, there is no need to submit an Annual Report.

C. The following FAR Clauses apply to this contract and are incorporated by reference with the same force and effect as if set forth in full text:

FAR CLAUSE	TITLE AND DATE
52.242.15	Stop Work Order (Aug 1989)
52.242.15	Stop work Order (Aug 1989), Alternate I (April 1984)
52.246-7	Inspection of Research and Development – Fixed-Price (Aug, 1996)
52.246-8	Inspection of Research and Development – Cost Reimbursement (April 1984)

EVALUATION FACTORS FOR CONTRACT AWARD

1. GENERAL

The major evaluation factors for this solicitation include technical (which encompasses experience and past performance factors), cost/price factors and Small Disadvantaged Business (SDB) Participation. Although technical factors are of paramount consideration in the award of the contract, cost/price and SDB participation is also important to the overall contract award decision. All evaluation factors other than cost or price, when combined, are significantly more important than cost or price. In any case, the Government reserves the right to make an award to that offeror whose proposal provides the best overall value to the Government.

The evaluation will be based on the demonstrated capabilities of the prospective Contractor in relation to the needs of the project as set forth in the RFP. The merits of the proposal will be evaluated carefully. The proposal must document the feasibility of successful implementation of the requirements of the RFP. Offerors must submit information sufficient to evaluate their proposals based on the detailed criteria listed below.

2. MANDATORY QUALIFICATION CRITERIA

Listed below are mandatory qualification criteria. The offeror shall include all information that documents and/or supports the qualification criteria in one clearly marked section of its proposal. The qualification criteria establishes conditions that must be met at the time of receipt of Final Proposal Revisions (FPRs) by the Contracting Officer in order for your proposal to be considered any further for award.

- a. Availability of an animal care facility, with a barrier system, this is certified by a veterinarian as being specific and pathogen free (SPF) on the basis of the absence of common pathogens, e.g., mouse hepatitis virus. The animal care facility shall be accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC; <http://www.aaalac.org/>).
- b. Documentation that the care and welfare of live mice will be in accordance with all federal, state, and local laws.
- c. Approval or pending approval for this activity from their local Institutional Animal Care and Use Committee (IACUC), and adhere to the responsibilities and requirements of live animal care as specified in:
 - i. Animal Welfare Act as amended (7 USC, 2131-2156) (<http://www.nal.usda.gov/awic/legislat/usdaleg1.htm>).
 - ii. Health Research Extension Act of 1985, P.L. 99-158 (<http://grants.nih.gov/grants/olaw/references/hrea1985.htm>).
 - iii. Guide for the Care and Use of Laboratory Animals (<http://oacu.od.nih.gov/regs/guide/guidex.htm>).

- d. A statement whereby the offeror agrees and is committed to the wide distribution (in an efficient, cost effective and timely manner) of mutant mouse strains and cryopreserved materials (sperm, embryos) as well as the construction and curation of a comprehensive public access database of neuroscience-relevant mouse phenotypic information on those strains. In order to eliminate the potential for patents on mutant mice and cryopreserved materials that would undermine the development of a widely available national resource the offeror must include a statement whereby the offeror agrees to abide by the terms and conditions imposed by the employment of FAR Clauses 52.227-11, “Patents Rights (Deviation)” and 52.227-14, “Rights in Data-General (Deviation)”. These clauses will restrict or eliminate the rights of the resulting contractor to retain title to subject inventions as they apply to mutant animals and the sperm and embryos (or ovaries) from which the mutant animals were created.
- e. A statement whereby the offeror agrees to require all researchers receiving mutant strains and cryopreserved materials to abide by the terms and conditions of a Materials Transfer Agreement that will be developed in consultation with the GPO.

3. TECHNICAL EVALUATION CRITERIA

The evaluation criteria are used by the technical evaluation committee when reviewing the technical proposals. Proposals will be judged solely on the written material provided by the Offeror.

Offerors shall have expertise and a demonstrated history of excellence and experience in all aspects of the work to be performed. Given that this is a highly technical endeavor, prior experience as well as ongoing activities in mouse husbandry, sperm and embryo preservation, genotyping, neuroscience-relevant phenotyping, and database construction and curation must be clearly demonstrated. The demonstrated evidence should specify current or past contracts, grants, or other research activities for related requirements, and the qualifications, availability, and experience of the professional and technical personnel necessary to perform contract requirements. Documentation demonstrating technical competence must include: minimizing tracking error in handling a large number of animals, sperm, and embryos (or ovaries), in a multi-step operation, elimination of contamination of animals, embryos (or ovaries), and sperm with specific pathogens, and availability of an SPF facility required for such activities. Previous or current experience in maintaining a facility shall be documented in the proposal. Offerors shall have expertise in conducting reliable neuroscience-relevant phenotyping in the mouse. Offerors shall also have expertise in developing and curating a state-of-the-art database that has been linked to other existing databases of biological information (e.g., genomic sequence, proteomics) relevant to mammalian biology, and with comparable databases for other model systems (e.g., *drosophila*, *C. elegans*). Offerors shall also demonstrate expertise in developing highly efficient bioinformatics algorithms and search engines for rapidly and efficiently querying the database.

Proposals submitted in response to this RFP will be evaluated based on the following factors, which are listed and weighted in order of their relative importance. The maximum score for a proposal is 300 points.

Part 1: MAINTENANCE, CHARACTERIZATION OF MOUSE MUTANT STRAINS (0 – 100 points)

- a) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience for performing confirmatory neuroscience-relevant phenotyping assays in mutant mouse strains, in specific domains of nervous system function and complex behavior that include:

motor function, seizure threshold, hearing and vision impairments, neural origins of obesity, learning and memory (as assessed by a fear-potentiated startle test and by fear conditioning), taste, auditory function, visual function, nociception, olfaction, abused drug response, alcohol response, social behavior, aging, circadian rhythmicity, and neuroendocrine function (hypothalamic-pituitary-adrenal and hypothalamic-pituitary-thyroid axes). **(0-35 Points)**

- b) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience in applying or improving state-of-the-art cryopreservation methodologies and techniques under specific pathogen free (SPF) conditions to mutant mouse strains, in order to reconstitute viable live animals of mutant strains from cryopreserved materials (at a minimum, sperm and embryos), prepare cryopreserved materials from live animals, and maintain cryopreserved materials. **(0-35 Points)**
- c) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience for performing confirmatory genotyping with flanking markers in the mouse, for the purpose of identifying carriers of genetic mutations. **(0-20 Points)**
- d) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience, either directly or through a collaborative network of researchers with expertise in mouse neuroscience-relevant phenotypes, for performing phenotyping assays in inbred mouse strains for neuroscience-relevant phenotypic domains that include: neural and sensory function; complex behavior; pharmacologic response; and imaging and electrophysiology. **(0-10 Points)**

Part 2: DATABASE DEVELOPMENT, CURATION (0 – 100 points)

- a) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience in cost-effectively and efficiently creating and curating biological databases (that include genetic, genomic, or phenotyping information), which are widely accessible and suitable for use by a broad range of researchers in the scientific community who have limited bioinformatics skills, and which are linked to other existing databases of biological information (e.g., genomic sequence, proteomics) relevant to mammalian biology and with comparable databases for other model systems (e.g., *drosophila*, *c. elegans*). **(0-45 Points)**
- b) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience in state-of-the-art bioinformatics, including the development of efficient algorithms and search engines for querying a database. This at a minimum shall include useful web interface to facilitate database access and utilization, highly efficient bioinformatics algorithms and search engines for rapidly and efficiently querying the database. These algorithms and search engines shall permit search and retrieval of strains that display abnormalities in one or more specific neuroscience-relevant phenotypic domains, and shall also permit the rapid and efficient identification of phenotypes determined by a complex set of quantitative rules (i.e., intact vision and sensory function but abnormal learning/memory and social behavior). **(0-45 Points)**
- c) Ability to perform a requirements analysis, in order to collect information related to the requirements, specifications, and organization of a database of neuroscience-relevant mouse phenotypic information on mutant strains, which shall be widely accessible and utilized by the neuroscience and behavioral scientific communities. **(0 –10 Points)**

Part 3: DISSEMINATION OF MUTANT STRAINS, PHENOTYPIC DATA (0 – 100 points)

- a) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience in cost-effectively and efficiently distributing in a timely fashion mutant mouse strains, whether as viable live SPF animals or as cryopreserved materials, for use by investigators in the scientific community. **(0-40 Points)**
- b) Demonstrated scientific and technical knowledge, skills, abilities, expertise, and experience in cost-effectively and efficiently distributing phenotypic and genetic mapping information on mutant strains, through a publicly accessible database suitable for use by a wide range of researchers in the scientific community. **(0-40 Points)**
- c) Availability and adequacy of the offeror's proposed facilities, equipment and other resources necessary for maintaining and distributing SPF animals in an infectious disease-free state. **(0-20 Points)**

4. PAST PERFORMANCE FACTOR

An evaluation of offeror's past performance information will be conducted prior to any communications with offerors leading to establishment of the competitive range. However, this evaluation will not be conducted on any offeror whose proposal will not be admitted to the competitive range on the basis of the results of the evaluation of factors other than past performance.

The evaluation will be based on information obtained from reference provided by the offerors, other relevant past performance information obtained from other sources known to the Government, and any information supplied by the offeror concerning problems encountered on the identified contracts and corrective action taken.

The Government will assess the relative risks associated with each offeror. Performance risks are those associated with an offeror's likelihood of success in performing the acquisition requirements as indicated by that offeror's record of past performance.

The assessment of performance risk is not intended to be a product of a mechanical or mathematical analysis of an offeror's performance on a list of contracts but rather the product of subjective judgment by the Government after it considers relevant information.

When assessing performance risks, the Government will focus on the past performance of the offeror as it relates to all acquisition requirements, such as the offeror's record of performing according to specifications, including standards of good workmanship; the offeror's record of controlling and forecasting cost, the offeror's adherence to contract schedules, including the administrative aspects of performance; the offeror's reputation for reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the offeror's business-like concern for the interest of the customer.

The Government will consider the currency and relevance of the information, source of the information, context of the data, and general trends in the offeror's performance.

The lack of a relevant performance record may result in an unknown performance risk assessment, which will neither be used to the advantage nor disadvantage of the offeror.

5. EXTENT OF SMALL DISADVANTAGED BUSINESS PARTICIPATION

SDB participation will not be scored, but the Government's conclusions about overall commitment and realism of the offeror's SDB Participation targets will be used in determining the relative merits of the offeror's proposal and in selecting the offeror whose proposal is considered to offer the best value to the Government.

The extent of the offeror's Small Disadvantaged Business Participation Targets will be evaluated before determination of the competitive range. Evaluation of SDB participation will be assessed based on consideration of the information presented in the offeror's proposal. The Government is seeking to determine whether the offeror has demonstrated a commitment to use SDB concerns for the work that it intends to perform.

Offers will be evaluated on the following sub-factors:

- (a) Extent to which SDB concerns are specifically identified
- (b) Extent of commitment to use SDB concerns
- (c) Complexity and variety of the work SDB concerns are to perform
- (d) Realism of the proposal
- (e) Past performance of offerors in complying with subcontracting plan goals for SDB concerns and monetary targets for SDB participation.
- (f) Extent of participation of SDB concerns in terms of the value of the total acquisition

6. EVALUATION OF OPTIONS

It is anticipated that the contract awarded from this solicitation will contain option provisions and period. In accordance with FAR Clause 52.217-5, "Evaluation of Options (July 1990)", the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement, except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interest. Evaluation of options will not obligate the Government to exercise the option(s).

SECTION L – INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

1. GENERAL INFORMATION

A. 1. INSTRUCTIONS TO OFFERORS – COMPETITIVE ACQUISITION (FAR Clause 52.215-1 (February 2000))

(a) *Definitions.* As used in this provision--

Discussions are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"*In writing*" or "*written*" means any worded or numbered expression which can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"*Proposal modification*" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"*Proposal revision*" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

"*Time*," if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) *Amendments to solicitations.* If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) *Submission, modification, revision, and withdrawal of proposals.* (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show--

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

- (iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and
 - (v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (3) *Submission, modification, revision, and withdrawal of proposals.* (i) Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.
- (ii) (A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--
 - (1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or
 - (2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or
 - (3) It is the only proposal received.
 - (B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
 - (iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
 - (v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

- (4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.
 - (5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.
 - (6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.
 - (7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.
 - (8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.
- (d) *Offer expiration date.* Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

[Note: In accordance with HHSAR 352.215-1, the following paragraph (e) is substituted for the subparagraph (e) of the provision at FAR 52.215-1.]

- (e) *Restriction on disclosure and use of data.* (1) The proposal submitted in response to this request may contain data (trade secrets; business data, e.g., commercial information, financial information, and cost and pricing data; and technical data) which the offeror, including its prospective subcontractor(s), does not want used or disclosed for any purpose other than for evaluation of the proposal. The use and disclosure of any data may be so restricted; provided, that the Government determines that the data is not required to be disclosed under the Freedom of Information Act, 5 U.S.C. 552, as amended, and the offeror marks the cover sheet of the proposal with the following legend, specifying the particular portions of the proposal which are to be restricted in accordance with the conditions of the legend. The Government's determination to withhold or disclose a record will be based upon the particular circumstances involving the record in question and whether the record may be exempted from disclosure under the Freedom of Information Act. The legend reads:

Unless disclosure is required by the Freedom of Information Act, 5 U.S.C. 552, as amended, (the Act) as determined by Freedom of Information (FOI) officials of the Department of Health and Human Services, data contained in the portions of this proposal which have been specifically identified by page number, paragraph, etc. by the offeror as containing restricted information shall not be used or disclosed except for evaluation purposes.

The offeror acknowledges that the Department may not be able to withhold a record (data, document, etc.) nor deny access to a record requested pursuant to the Act and that the Department's

FOI officials must make that determination. The offeror hereby agrees that the Government is not liable for disclosure if the Department has determined that disclosure is required by the Act.

If a contract is awarded to the offeror as a result of, or in connection with, the submission of this proposal, the Government shall have right to use or disclose the data to the extent provided in the contract. Proposals not resulting in a contract remain subject to the Act.

The offeror also agrees that the Government is not liable for disclosure or use of unmarked data and may use or disclose the data for any purpose, including the release of the information pursuant to requests under the Act. The data subject to this restriction are contained in pages (insert page numbers, paragraph designations, etc. or other identification).

- (2) In addition, the offeror should mark each page of data it wishes to restrict with the following statement:

“Use or disclosure of data contained on this page is subject to the restriction on the cover sheet of this proposal or quotation.”

- (3) Offerors are cautioned that proposals submitted with restrictive legends or statements differing in substance from the above legend may not be considered for award. The Government reserves the right to reject any proposal submitted with a nonconforming legend.

- (f) *Contract award.* (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.

- (2) The Government may reject any or all proposals if such action is in the Government's interest.

- (3) The Government may waive informalities and minor irregularities in proposals received.

- (4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.
- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.
- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) The Government may disclose the following information in postaward debriefings to other offerors:
 - (i) The overall evaluated cost or price and technical rating of the successful offeror;
 - (ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;
 - (iii) A summary of the rationale for award; and
 - (iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(End of Provision)

Alternate I (October 1997). As prescribed in 15.209(a)(1), substitute the following paragraph (f)(4) for paragraph (f)(4) of the basic provision:

- (f) (4) The Government intends to evaluate proposals and award a contract after conducting discussions with offerors whose proposals have been determined to be within the competitive range. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals. Therefore, the offeror's initial proposal should contain the offeror's best terms from a price and technical standpoint.

B. JUST IN TIME

This RFP contains special procedures for the submission of business management proposals. These special procedures are designed to reduce the administrative burden on offerors without compromising the information needed during the initial evaluation of proposals. Certain documents will no longer be required to be submitted with initial proposals, but will be requested at a later stage in the discussion process. Specifically, the travel policy, the annual financial statement, the total compensation plan, and certain types of cost/pricing information will only be required to be submitted from those offerors included in the competitive range, or the apparent successful offeror. The special procedures for submission of this documentation are set forth in detail below:

Travel Policy: The offeror's (and any proposed subcontractor's) written travel policy shall **not** be submitted with the initial business proposal. All offerors included in the competitive range will be required to submit a travel policy as a part of their Final Proposal Revision (FPR).

Annual Report: The offeror's most recent annual report shall **not** be submitted with the initial business proposal. All offerors included in the competitive range will be required to submit a copy of their most recent annual report as a part of their final FPR.

Total Compensation Plan: The offeror's total compensation plan shall **not** be submitted with the initial business proposal. All offerors included in the competitive range will be required to submit a total compensation plans as a part of their FPR.

Subcontracting Plan: The offeror's Small Business Subcontracting Plan shall not be submitted with the initial business proposal. Only the apparent successful offeror will be required to submit an acceptable subcontracting plan.

Cost/Pricing Information: The offeror's business proposal shall include the basic cost/pricing information specified in the BUSINESS PROPOSAL INSTRUCTIONS of this RFP. In addition, the Government may require offerors included in the competitive range to submit additional information substantiating their proposed costs or prices. This additional cost/pricing information will be requested after establishment of the competitive range, and potentially includes payroll documentation, vendor quotes, invoice prices, and/or any other information deemed necessary by the contracting officer to evaluate the reasonableness of the price or to determine cost realism. (The information may also include the submission and certification of cost or pricing data.)

C. NAICS CODE AND SIZE STANDARD

Note: The following information is to be used by the offeror in preparing its Representations and Certifications, specifically in completing the provision entitled, SMALL BUSINESS PROGRAM REPRESENTATION, FAR Clause 52.219-1.

1. The North American Industry Classification System (NAICS) code for this acquisition is 541710.
2. The small business size standard is 500 employees.

THIS REQUIREMENT IS NOT SET-ASIDE FOR SMALL BUSINESS. However, the Federal Acquisition Regulation (FAR) requires in every solicitation (except for foreign acquisitions), the inclusion of the North American Industry Classification Systems (NAICS)

Code and corresponding size standard which best describes the nature of the requirement in the solicitation.

D. NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS

In accordance with FAR Clause 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, offerors will be evaluated by adding a factor of 10 percent to the price of all offers, except offers from small disadvantaged business concerns that have not waived the adjustment. (Note: A listing of other offerors who are excepted and will not have this evaluation factor added to their offer may be found in subparagraph (b) of FAR Clause 52.219-23.

E. TYPE OF CONTRACT AND NUMBER OF AWARD(S)

It is anticipated that one award will be made from this solicitation and that the award will be made on/about February 1, 2002.

It is anticipated that the award from this solicitation will be a one-year Completion type contract with five - one year options, and that incremental funding will be used. In addition, the resulting contract will contain an Option for the performance of Additional Services.

NOTE: Some aspects of the Statement of Work (SOW) will be reimbursed on a fixed unit price basis while other aspects of the SOW will be reimbursed on a cost basis. Refer to Task I, “Employment of a Pricing Schedule” of the SOW (found in Attachment 1 to this RFP) to determine which tasks will be cost reimbursement and which tasks will be fixed unit priced. Fixed unit price tasks indicate a “MINIMUM”, “EXPECTED” and “MAXIMUM” quantity of strains that the contractor will be required to perform. For proposal purposes all offerors are to base their “TOTAL COST NOT to EXCEED” on the “EXPECTED number of strains required.

F. COMMITMENT OF PUBLIC FUNDS

The CO is the only individual who can legally commit the Government to the expenditure of public funds in connection with the proposed procurement. Any other commitment, either explicit or implied, is invalid.

G. COMMUNICATIONS PRIOR TO CONTRACT AWARD

Offerors shall direct all communications to the attention of the CO cited on the face page of this RFP. Communications with other officials may compromise the competitiveness of this acquisition and result in cancellation of the requirement.

H. RELEASE OF INFORMATION

Contract selection and award information will be disclosed to offerors in accordance with regulations applicable to negotiated acquisition. Prompt written notice will be given to unsuccessful offerors as they are eliminated from the competition, and to all offerors following award.

I. COMPARATIVE IMPORTANCE OF PROPOSALS

You are advised that paramount consideration shall be given to the evaluation of technical proposals. All evaluation factors other than cost or price, when combined, are significantly more important than cost or price. The relative importance of the evaluation factors is specified in Attachment 3 of this solicitation. However, the Government reserves the right to make an award to the best advantage of the Government, cost and other factors considered.

J. PREPARATION COSTS

This RFP does not commit the Government to pay for the preparation and submission of a proposal.

K. SERVICE OF PROTEST (AUGUST 1996) – FAR 52.233-2

Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the CO (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

If hand-delivered or delivery service

National Institute of Mental Health
Contracts Management Branch
Attn: Contracting Officer
6001 Executive Boulevard
Room 6107, MSC 9603
Rockville, Maryland 20852

If using U.S. Postal Service

National Institute of Mental Health
Contracts Management Branch
Attn: Contracting Officer
6001 Executive Boulevard,
Room 6107, MSC 9603
Bethesda, Maryland 20892-9603

The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

L. LATE PROPOSALS AND REVISIONS, HHSAR 352.215-70

Notwithstanding the procedures contained in FAR 52.215-1(c)(3) of the provision of this solicitation entitled Instructions to Offerors-Competitive Acquisition, a proposal received after the date specified for receipt may be considered if it offers significant cost or technical advantages to the Government; and it was received before proposals were distributed for evaluation, or within five calendar days after the exact time specified in receipt, whichever is earlier.

M. HHSAR 352.223-70 SAFETY AND HEALTH (JANUARY 2001)

- (a) To help ensure the protection of the life and health of all persons, and to help prevent damage to property, the Contractor shall comply with all Federal, State and local laws and regulations applicable to the work being performed under this contract. These laws are implemented and/or enforced by the Environmental Protection Agency, Occupational Safety and Health Administration and other agencies at the Federal, State and local levels (Federal, State and local regulatory/enforcement agencies).
- (b) Further, the Contractor shall take or cause to be taken additional safety measures as the Contracting Officer in conjunction with the project or other appropriate officer, determines to be reasonably necessary. If compliance with these additional safety measures results in an increase or decrease in the cost or time required for performance of any part of work under this contract, an equitable

adjustment will be made in accordance with the applicable "Changes" Clause set forth in this contract.

- (c) The Contractor shall maintain an accurate record of, and promptly report to the Contracting Officer, all accidents or incidents resulting in the exposure of persons to toxic substances, hazardous materials or hazardous operations; the injury or death of any person; and/or damage to property incidental to work performed under the contract and all violations for which the Contractor has been cited by any Federal, State or local regulatory/enforcement agency. The report shall include a copy of the notice of violation and the findings of any inquiry or inspection, and an analysis addressing the impact these violations may have on the work remaining to be performed. The report shall also state the required action(s), if any, to be taken to correct any violation(s) noted by the Federal, State or local regulatory/enforcement agency and the time frame allowed by the agency to accomplish the necessary corrective action.
- (d) If the Contractor fails or refuses to comply promptly with the Federal, State or local regulatory/enforcement agency's directive(s) regarding any violation(s) and prescribed corrective action(s), the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action (as approved by the Federal, State or local regulatory/enforcement agencies) has been taken and documented to the Contracting Officer. No part of the time lost due to any stop work order shall be subject to a claim for extension of time or costs or damages by the Contractor.
- (e) The Contractor shall insert the substance of this clause in each subcontract involving toxic substances, hazardous materials, or operations. Compliance with the provisions of this clause by subcontractors will be the responsibility of the Contractor.

(End of clause)

N. GOVERNMENT NOTICE FOR HANDLING PROPOSALS

NOTE: This Notice is for the Technical Evaluation Review Group who will be reviewing the proposals submitted in response to this RFP. THE OFFEROR SHALL PLACE A COPY OF THIS NOTICE BEHIND THE TITLE PAGE OF EACH COPY OF THE TECHNICAL PROPOSAL.

GOVERNMENT NOTICE OF HANDLING PROPOSALS

This proposal shall be used and disclosed for evaluation purposes only, and a copy of this Government notice shall be applied to any reproduction or abstract thereof. Any authorized restrictive notices which the submitter places on this proposal shall be strictly complied with. Disclosure of this proposal outside the Government for evaluation purposes shall be made only to the extent authorized by, and in accordance with, the procedures in HHSAR paragraph 352.215-1.

- (a) If authorized in agency implementing regulations, agencies may release proposals outside the Government for evaluation, consistent with the following:
 - (1) Decisions to release proposals outside the Government for evaluation purposes shall be made by the agency head or designee;
 - (2) Written agreement must be obtained from the evaluator that the information (data) contained in the proposal will be used only for evaluation purposes and will not be further disclosed;

- (3) Any authorized restrictive legends placed on the proposal by the prospective Contractor or subcontractor or by the Government shall be applied to any reproduction or abstracted information made by the evaluator;
 - (4) Upon completing the evaluation, all copies of the proposal, as well as any abstracts thereof, shall be returned to the Government office which initially furnished them for evaluation; and
 - (5) All determinations to release the proposal outside the Government take into consideration requirements for avoiding organizational conflicts of interest and the competitive relationship, if any, between the prospective Contractor or subcontractor and the prospective outside evaluator.
- (b) The submitter of any proposal shall be provided notice adequate to afford an opportunity to take appropriate action before release of any information (data) contained therein pursuant to a request under the Freedom of Information Act (5 U.S.C. 552); and, time permitting, the submitter should be consulted to obtain assistance in determining the eligibility of the information (data) in question as an exemption under the Act. (See also Subpart 24.2, Freedom of Information Act.)

2. INSTRUCTIONS TO OFFERORS

A . GENERAL INSTRUCTIONS

The following instructions will establish the acceptable minimum requirements for the format and content of proposals. Special attention is directed to the requirements for technical and business proposals to be submitted in accordance with these instructions.

(1) **Type Contract and General Clauses**

It is contemplated that a completion type contract with some aspects of the SOW being reimbursed on a cost basis and other aspects of the SOW being reimbursed on a fixed unit price basis will be awarded. (See General Information). Any resultant contract shall include the clauses applicable to the selected offeror's organization and type of contract awarded as required by Public Law, Executive Order, or acquisition regulations in effect at the time of execution of the proposed contract.

(2) **Authorized Official and Submission of Proposal**

The proposal must be signed by an official authorized to bind your organization and must stipulate that it is predicated upon all the terms and conditions of this RFP. Your proposal shall be submitted in the number of copies, to the address in the attached solicitation cover letter, and mark each package as follows: RFP No. NIMH-01-Dn-0018 TO BE OPENED BY AUTHORIZED GOVERNMENT PERSONNEL ONLY. Proposals will be typewritten, paginated, reproduced on letter size paper and will be legible in all required copies. To expedite the proposal evaluation, all documents required for responding to the RFP should be placed in the following order:

(a) COVER SHEET

Include RFP number, title, name of organization, identification of the proposal part, and indicate whether the proposal is an original or a copy.

(b) TECHNICAL PROPOSAL

It is recommended that the technical proposal consist of a cover page, a table of contents, and the information requested in the Technical Proposal Instructions and as otherwise specified in the APPLICABLE RFP REFERENCES (ATTACHMENT 6).

(c) BUSINESS PROPOSAL

It is recommended that the business proposal consist of a cover page, a table of contents, and the information requested in the Business Proposal Instructions and as otherwise specified in the APPLICABLE RFP REFERENCES (ATTACHMENT 6).

(3) Proposal Summary and Data Record (NIH-2043)

The Offeror must complete the Form NIH-2043 with particular attention to the length of time the proposal is firm and the designation of those personnel authorized to conduct negotiations. (See Attachment 6).

(4) Separation of Technical and Business Proposals

The proposal must be prepared in two parts: a "Technical Proposal" and a "Business Proposal." Each of the parts shall be separate and complete in itself so that evaluation of one may be accomplished independently of, and concurrently with, evaluation of the other. The technical proposal must include direct cost and resource information, such as labor-hours and categories, materials, subcontracts, travel, etc, and associated cost so that the offeror's understanding of the project may be evaluated. (See Attachment 6, "Technical Proposal Cost Information"). However, the technical proposal should not include pricing data relating to individual salary information, indirect cost rates or amounts, fee amounts (if any), and total costs. The technical proposal should disclose your technical approach in as much detail as possible, including, but not limited to, the requirements of the technical proposal instructions.

(5) Alternate Proposals

You may, at your discretion, submit alternate proposals, or proposals which deviate from the requirements; provided, that you also submit a proposal for performance of the work as specified in the statement of work. Such proposals may be considered if overall performance would be improved or not compromised and if they are in the best interests of the Government. Alternative proposals, or deviations from any requirements of this RFP, shall be clearly identified.

(6) Evaluation of Proposals

The Government will evaluate technical proposals in accordance with the criteria set forth in Attachment 3, "Evaluation Factors for Contract Award".

(7) Potential Award Without Discussions

The Government reserves the right to award a contract without discussions if the CO determines that the initial prices are fair and reasonable and that discussions are not necessary.

(8) Use of the Metric System of Measurement

It is the policy of the Department of Health and Human Services to support the Federal transition to the metric system and to use the metric system of measurement in all procurements, grants, and other business related activities unless such use is impracticable or is likely to cause significant inefficiencies.

The offeror is encouraged to prepare their proposal using either "Hard Metric," "Soft Metric," or "Dual Systems" of measurement. The following definitions are provided for your information:

Hard Metric - The replacement of a standard inch-pound size with an accepted metric size for a particular purpose. An example of size substitution might be: selling or packaging liquids by the liter instead of by the pint or quart (as for soft drinks), or instead of by the gallon (as for gasoline).

Soft Metric - The result of a mathematical conversion of inch-pound measurements to metric equivalents for a particular purpose. The physical characteristics are not changed.

Dual Systems - The use of both inch-pound and metric systems. For example, an item is designed, produced, and described in inch-pound values with soft metric values also shown for information or comparison purposes.

(9) Care of Live Vertebrate Animals

Notice to Offerors of Requirement for Adequate Assurance of Protection of Vertebrate Animal Subjects – (September 1985)

The Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals establishes a number of requirements for research activities involving animals. Before a PHS award may be made to an applicant organization, the organization shall file, with the Office of Extramural Research (OER), Office of Laboratory Animal Welfare (OLAW), National Institutes of Health (NIH), PHS, a written Animal Welfare Assurance which commits the organization to comply with the provisions of the PHS Policy on Humane Care and Use of laboratory Animals by Awardee Institutions, the Animal Welfare Act, and the Guide for the Care and Use of Laboratory Animals prepared by the Institute of Laboratory Animal Resources. In accordance with the PHS Policy on Humane Care and Use of Laboratory Animals by Awardee Institutions, applicant organizations must establish a committee, qualified through the experience and expertise of its members, to oversee the institution's animal program, facilities and procedures. No PHS award involving the use of animals shall be made unless the Animal Welfare Assurance has been approved by OER. Prior to award, the Contracting Officer will notify Contractor(s) selected for projects that involve live vertebrate animals that an Animal Welfare Assurance is required. The Contracting Officer will request that OER, OLAW negotiate an acceptable Animal Welfare Assurance with those Contractor(s). For further information, OER, OLAW, may be contacted at Rockledge Center I, Suite 1050, 6705 Rockledge Drive, Bethesda, MD 20817, (301) 496-7163, ext. 234. FAX copies of the PHS Policy are available at (301) 402-

2803. This policy is also available on the internet at <http://www.grants.nih.gov/grants/olaw/olaw.htm>.

(10) **Privacy Act**

The Privacy Act of 1974 (P.L. 93-579) requires that a Federal agency advise each individual whom it asks to supply information, the authority which authorizes the solicitation, whether disclosure is voluntary or mandatory, the principal purpose or purposes for which the information is intended to be used, the uses outside the agency which may be made of the information, and the effects on the individual, if any, of not providing all or any part of the requested information.

The NIH is requesting the information called for in this RFP pursuant to the authority provided by Sec. 301(a)(7) of the Public Health Service Act, as amended, and, as applicable, P.L. 92-218, as amended.

Providing the information requested is entirely voluntary. The collection of this information is for the purpose of conducting an accurate, fair, and adequate review prior to a discussion as to whether to award a contract.

Failure to provide any or all of the requested information may result in a less than adequate review.

In addition, the Privacy Act of 1974 (P.L. 93-579, Section 7) requires that the following information be provided when individuals are requested to disclose their social security number.

Provision of the social security number is voluntary. Social security numbers are requested for the purpose of accurate and efficient identification, referral, review and management of NIH contracting programs. Authority for requesting this information is provided by Section 301 and Title IV of the PHS Act, as amended.

The information provided by you may be routinely disclosed for the following purposes:

- to the cognizant audit agency and the General Accounting Office for auditing.
- to the Department of Justice as required for litigation.
- to respond to congressional inquiries.
- to qualified experts, not within the definition of Department employees, for opinions as a part of the review process.

The System of Records applicable to this requirement may be accessed at URL: <http://www.nimh.nih.gov/grants/privacyact1997.pdf>

(11) **Selection of Offerors**

- a) The acceptability of the scientific and technical portion of each research contract proposal will be evaluated by a technical review committee. The committee will evaluate each proposal in strict conformity with the evaluation criteria of the RFP, utilizing point scores and written critiques. The committee may suggest that the Contracting Officer request clarifying information from an offeror.

- b) The business portion of each contract proposal will be subjected to a cost and price analysis, management analysis, etc.
- c) If award will be made without conducting discussions, offerors may be given the opportunity to clarify certain aspects of their proposal (e.g., the relevance of an offeror's past performance information and adverse past performance information to which the offeror has not previously had an opportunity to respond) or to resolve minor or clerical errors.
- d) If the Government intends to conduct discussions prior to awarding a contract-

All aspects of the proposals are subject to discussions, including cost, technical approach, past performance, and contractual terms and conditions. At the conclusion of discussions, each offeror shall be given an opportunity to submit a written Final Proposal Revision (FPR) with the reservation of the right to conduct limited negotiations after Final Proposal Revisions (FPRs) in accordance with HHSAR 315.370.

- e) The process described in FAR 15.101-1 will be employed, which permits the Government to make tradeoffs among cost or price and non-cost factors and to consider award to other than the lowest price offeror or other than the highest technically rated offeror. This process will take into consideration the results of the technical evaluation, the past performance evaluation (if applicable) and the cost analysis.
- f) The NIMH reserves the right to make a single award, multiple awards, or no award at all from this RFP. In addition, the RFP may be amended or canceled as necessary to meet NIMH requirements. Synopses of awards exceeding \$25,000 will be published in the Commerce Business Daily.

(12) **Small Business Subcontracting Plan**

****** This document is INCLUDED in the "Just In Time" procedures. ******

If the proposed contract exceeds a total estimated cost of \$500,000 for the entire period of performance, the offeror shall be required to submit an acceptable subcontracting plan in accordance with the terms of the clause entitled "Small Business Subcontracting Plan," FAR Clause No. 52.219-9, incorporated herein by reference in the Solicitation.

- a) THIS PROVISION DOES NOT APPLY TO SMALL BUSINESS CONCERNS.
- b) The term "subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for the performance of the original contract or subcontract. This includes, but is not limited to, agreements/purchase orders for supplies and services such as equipment purchase, copying services, and travel services.
- c) The offeror understands that:

- (1) No contract will be awarded unless and until an acceptable plan is negotiated with the Contracting Officer which plan will be incorporated into the contract, as a material part thereof.
 - (2) An acceptable plan must, in the determination of the Contracting Officer, provide the maximum practicable opportunity for small business concerns and small business concerns owned and controlled by socially and economically disadvantaged persons to participate in the performance of the contract.
 - (3) If a subcontracting plan acceptable to the Contracting Officer is not negotiated within the time limits prescribed by the contracting activity and such failure arises out of causes within the control and with the fault or negligence of the offeror, the offeror shall be ineligible for an award. The Contracting Officer shall notify the Contractor in writing of the reasons for determining a subcontracting plan unacceptable early enough in the negotiation process to allow the Contractor to modify the plan within the time limits prescribed.
 - (4) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.
 - (5) It is the offeror's responsibility to develop a satisfactory subcontracting plan with respect to small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, and women-owned small business concerns and that each such aspect of the offeror's plan will be judged independent of the other.
 - (6) The offeror will submit, as required by the Contracting Officer, subcontracting reports in accordance with the instructions thereon, and as further directed by the Contracting Officer. Subcontractors will also submit these reports to the Government's Contracting Officer or as otherwise directed, with a copy to the prime Contractor's designated small and disadvantaged business liaison.
- d) Each plan must contain the following:
- (1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of Small, small disadvantaged, women-owned, and HUBZone small business concerns as subcontractors.
 - (2) A statement of total dollars planned to be subcontracted. A statement of total dollars to be subcontracted to each of the following type of small business concerns: Small, Small Disadvantaged, Women-Owned, and HUBZone Small Businesses.
 - (3) A description of the principal types of supplies and services to be subcontracted with an identification of which supplies and services are expected to be subcontracted to small, small disadvantaged, women-owned, and/or HUBZone small business concerns.
 - (4) A description of the method used to develop the subcontracting goals.

- (5) A description of the method used to identify potential sources for solicitation purposes.
- (6) A statement as to whether or not indirect costs were included in establishing subcontracting goals. If they were, a description of the method used to determine the proportionate share of indirect costs to be incurred with small, small disadvantaged, women-owned, and HUBZone small business concerns.
- (7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program and a description of his/her duties.
- (8) A description of the efforts the offeror will make to assure that small, small disadvantaged, women-owned, and HUBZone small business concerns have an equitable chance to compete for subcontracts.
- (9) Assurances that the offeror will include in all subcontracts the contract clause "Utilization of Small Business Concerns." Assure that all subcontractors, other than small businesses, in excess of \$500,000 adopt a plan similar to the plan agreed upon by the offeror.
- (10) Assurances that the offeror (and any required subcontractors) will cooperate in studies or surveys as required and submit required reports (SF 294 and SF 295) to the Government.
- (11) List the types of records the offeror will maintain to demonstrate procedures that have been adopted to comply with the requirement and goals in the plan, including establishing source lists. Also, the offeror shall describe its efforts to locate small, small disadvantaged, women-owned, and HUBZone small business concerns and award subcontracts to them.

For additional information about each of the above elements required to be contained in the subcontracting plan, see FAR Clause 52.219-9, Small Business Subcontracting Plan and Attachment 5 to the RFP.

(13) HUBZone Small Business Concerns

Small Business offerors located in underutilized business zones, called "HUBZones," will be evaluated in accordance with FAR Clause 52.219-4, NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS, which is incorporated by reference in this solicitation. Qualified HUBZone firms are identified in the Small Business Administration website at <http://www.sba.gov/hubzone>.

(14) Extent of Small Disadvantaged Business Participation

In accordance with FAR Subpart 15.304(c)(4), the extent of participation of Small Disadvantaged Business (SDB) concerns in performance of the contract in the authorized NAICS Industry Subsectors shall be evaluated in unrestricted competitive acquisitions expected to exceed \$500,000 (\$1,000,000 for construction) subject to certain limitations (see FAR 19.1202-1 and 19.1202-2(b)). The dollar amounts cited above include any option years/option quantities

that may be included in this solicitation. The definition of a “small disadvantaged business” is cited in FAR 19.001.

The factor entitled “Extent of Small Disadvantaged Business Participation” as set forth under the Evaluation Criteria in Attachment 3 shall be used for evaluation purposes. Credit under this evaluation factor is not available to SDB concerns that receive a Price Evaluation Adjustment (PEA) under FAR 19.11. Therefore, an SDB will be evaluated on this factor only if that SDB concern waives the PEA. **Waiver of the price evaluation adjustment shall be clearly stated in the proposal.**

The Department of Commerce determines, on an annual basis, by Subsectors, as contained in the North American Industry Classification System (NAICS) codes, and region, if any, the authorized SDB procurement mechanisms and applicable factors (percentages). The NAICS codes can be found at <http://www.sba.gov/size/SIC2NAICSmain.html> .

The Department of Commerce website for the annual determination is:
<http://www.arnet.gov/References/sdbadjustments.htm>.

Offerors shall include with their offers, SDB targets, expressed as dollars and percentages of total contract value, in each of the applicable, authorized NAICS Industry Subsector(s). The applicable authorized NAICS Industry Subsector for this project is **621**. A total target for SDB participation by the prime contractor, that includes any joint ventures and team members, shall be provided as well as a total target for SDB participation by subcontractors. In addition, offerors must provide information that describes their plans for meeting the targets set forth in their proposal. **This information shall be provided in one clearly marked section of the Business Proposal, which shall describe the extent of participation of SDB concerns in the performance of the contract.**

If the evaluation factor in this solicitation includes SDB evaluation factor or subfactor that considers the extent to which SDB concerns are specifically identified, the SDB concerns considered in the evaluation shall be listed in any resultant contract. Offerors should note that addressing the extent of small disadvantaged business participation **is not in any way intended to be a substitute** for submission of the subcontracting plan, if it is required by this solicitation. An example of the type of information that might be given (in addition to the narrative describing the plan for meeting the targets) follows:

EXAMPLE

Targets for SDB Participation – NAICS Industry Subsector 621

	SDB Percentage of Total Contract Value	SDB Dollars
Total Contract Value - \$1,000,000	25%	\$250,000
SDB Participation by Prime	10%	\$100,000

(Includes joint venture partners and
team arrangements)*

SDB Participation by subcontractor	15%	\$150,000
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*Note: FAR Subpart 9.6 defines “Contractor team arrangements” to include two or more companies forming a partnership or joint venture to act as a potential prime contractor, or a potential prime contractor who agrees with one or more companies to have them act as its subcontractors on a specified contract or acquisition program. For purposes of evaluation of the SDB participation factor, FAR 19.1202-4 requires that SDB joint ventures and teaming arrangements at the prime level be presented from SDB participation by subcontractors.

(15) **Reimbursement of Costs for Independent Research and Development Projects (Commercial Organizations Only)**

The primary purpose of the Public Health Service (PHS) is to support and advance independent research within the scientific community. This support is provided in the form of contracts and grants totaling approximately 7 billion dollars annually. PHS has established effective, time tested and well recognized and accepted procedures for stimulating and supporting this independent research by selecting from multitudes of proposals those research projects most worthy of support within the constraints of its appropriations. The reimbursement of independent research and development costs not incidental to product improvement, through the indirect cost mechanism, would circumvent this competitive process.

To ensure that all research and development projects receive similar and equal consideration, all offerors may compete for direct funding for independent research and development projects they consider worthy of support by submitting those projects to the appropriate Public Health Service grant and/or contract office for review. Since these projects may be submitted for direct funding, the successful offeror agrees that no costs for any independent research and development project, including applicable indirect costs, will be claimed under any contract resulting from this solicitation.

(16) **Salary Rate Limitation in Fiscal Year 2001***

Offerors are advised that pursuant to P.L. 106-554, no NIH Fiscal year 2001 (October 1, 2000 – September 30, 2001) funds may be used to pay the direct annual salary of an individual through any contract awarded as a result of this solicitation at a rate in excess of the Executive Schedule, Level I* (direct salary is exclusive of Overhead, Fringe Benefits and General and Administrative expenses, also referred to as “indirect cost” or “facilities and administrative (F&A) costs”). Direct salary has the same meaning as the term “institutional base salary.” An individual’s direct salary (or institutional base salary) is the annual compensation that the contractor pays for an individual’s appointment whether that individual’s time is spent on research, teaching, patient care or other activities. Direct salary (or institutional base salary) excludes any income that an individual may be permitted to earn outside of duties to the contractor.

This does not preclude the offeror from absorbing that portion of an employee’s annual salary (plus the dollar amount for fringe benefits and associated indirect costs) that exceeds a rate of the Executive Schedule, Level I*. The salary rate limitation set by P.L. 106-554 applies only to Fiscal Year 2001, however, salary rate ceilings for subsequent years may be included in future DHHS appropriation acts. Multi-year contracts awarded pursuant to this solicitation may be subject to unilateral modifications by the Government if an individual’s annual salary exceeds any salary rate ceiling established in future appropriations acts. The Executive Schedule, Level

I* annual salary rate limit also applies to individuals proposed under subcontracts, however it does not apply to consultants. P.L. 106-554 states in pertinent part:

“None of the funds appropriated in this Act for the National Institutes of Health and the Substance Abuse, and Mental Health Services Administration shall be used to pay the salary of an individual through a grant or extramural mechanism at a rate in excess of Executive Level I.”

***This rate may change periodically. For your information, the rate can be found at: http://ocm.od.nih.gov/contracts/pdfs/sal_lim.pdf .**

(17) Institutional Responsibility Regarding Conflicting Interests of Investigators

EACH INSTITUTION MUST:

- (a) Maintain an appropriate written, enforced policy on conflict of interest that complies with 42 CFR Part 50 Subpart F and/or 45 CFR Part 94 as appropriate and inform each investigator of the Institution's policy, the Investigator's reporting responsibilities, and the applicable regulations. If the Institution carries out the NIH funded research through subgrantees, contractors or collaborators, the Institution must take reasonable steps to ensure that Investigators working for such entities comply with the regulations, either by requiring those investigators to comply with the Institution's policy or by requiring the entities to provide assurances to the Institution that will enable the Institution to comply with the regulations.
- (b) Designate an Institutional official(s) to solicit and review financial disclosure statements from each Investigator who is planning to participate in NIH-funded research.
- (c) Require that by the time an application/proposal is submitted to the NIH each investigator who is planning to participate in the NIH-funded research has submitted to the designated official(s) a listing of his/her known Significant Financial Interests (and those of his/her spouse and dependent children): (i) that would reasonably appear to be affected by the research for which the NIH funding is sought; and (ii) in entities whose financial interests would reasonably appear to be affected by the research. All financial disclosures must be updated during the period of the award, either on an annual basis or as new reportable Significant Financial Interests are obtained.
- (d) Provide guidelines consistent with the regulations for the designated official(s) to identify conflicting interests and take such actions as necessary to ensure that such conflicting interests will be managed, reduced, or eliminated.
- (e) Maintain records, identifiable to each award, of all financial disclosures and all actions taken by the institution with respect to each conflicting interest for: (1) in the case of grants, at least three years from the date of submission of the final expenditures report or, where applicable, from other dates specified in 45 CFR Part 74.53(b) and (2) in the case of contracts, 3 years after final payment or, where applicable, for the other time period specified in 48 CFR Part 4 Subpart 4.7, Contract Records Retention.
- (f) Establish adequate enforcement mechanisms and provide for sanctions where appropriate.

(g) Certify, in each application/proposal for funding to which the regulations applies, that:

(1) there is in effect at the Institution a written and enforced administrative process to identify and manage, reduce or eliminate conflicting interests with respect to all research projects for which funding is sought from the NIH;

(2) prior to the Institution's expenditure of any funds under the award, the Institution will report to the awarding component the existence of a conflicting interest (but not the nature of the interest or other details) found by the Institution and assure that the interest has been managed, reduced or eliminated in accord with the regulations; and for any interest that the Institution identifies as conflicting subsequent to the expenditure of funds after award, the report will be made and the conflicting interest managed, reduced, or eliminated, at least on a temporary basis within sixty days of that identification;

(3) the Institution agrees to make information available, upon request, to the awarding component regarding all conflicting interests identified by the Institution and how those interested have been managed, reduced, or eliminated to protect the research from bias; and

(4) the Institution will otherwise comply with the regulations.

(18) Institutional Management of Conflicting Interests

(1) The designated official(s) must: (i) review all financial disclosures; and (ii) determine whether conflict of interest exists, and if so, determine what actions should be taken by the Institution to manage, reduce or eliminate such conflict of interest. A conflict of interest exists when the designated official(s) reasonably determines that a Significant Financial Interest could directly and significantly affect the design, conduct, or reporting of the NIH-funded research. Examples of conditions or restrictions that might be imposed to manage actual or potential conflicts of interests include, but are not limited to:

- i. public disclosure of significant financial interests;
- ii. monitoring of research by independent reviewers;
- iii. modification of the research plan;
- iv. disqualification of the Investigator(s) from participation in all or a portion of the research funded by the awarding component;
- v . divestiture of significant financial interests; or
- vi. severance of relationships that create actual or potential conflicts of interests.

(2) An Institution may require the management of other conflicting financial interests in addition to those described in paragraph (1) of this section, as the Institution deems appropriate.

(19) ROTC Access and Federal Military Recruiting on Campus

Section 514 of the FY 1997 Appropriations Act prohibits NIH from providing contract funds to educational institutions that the Secretary of Defense determines have a policy or practice (regardless of when implemented) that either prohibits, or in effect prevents (1) the maintaining, establishing, or operation of a unit of the Senior Reserve Officer Training Corps at the covered

education entity; or (2) a student at the covered educational entity from enrolling in a unit of the Senior Reserve Officer Training Corps at another institution of higher education.

Further, contract funds may not be provided to educational institutions that have a policy or practice that prohibits or prevents (i) entry to campuses, or access to students (who are 17 years of age or older) on campuses, for purposes of Federal military recruiting; or (ii) access by military recruiters for purposes of Federal military recruiting to information pertaining to students (who are 17 years of age or older) enrolled at the covered educational entity.

(20) Past Performance Information

Offerors shall submit the following information as part of their BUSINESS proposal:

A list of the last several contracts completed during the past three years and all contracts currently in process that are similar in nature to the solicitation work scope. Contracts listed may include those entered into by the Federal Government, agencies of state and local governments and commercial concerns. Offerors that are newly formed entities without prior contracts should list contracts and subcontracts as required above for all key personnel.

Include the following information for each contract or subcontract:

- a) Name of Contracting Organization
- b) Contract Number (for subcontracts, provide the prime contract number and the subcontract contract number)
- c) Contract Type
- d) Total Contract Value
- e) Description of Requirement
- f) Contracting Officer's Name and Telephone Number
- g) Program Manager's Name and Telephone Number
- h) Standard Industrial Code

The offeror shall submit comparable information on all subcontracts that the offeror proposes to perform a major subcontract under this effort. For the purpose of this solicitation, a "major subcontract" is defined as one that exceeded one million dollars in total negotiated costs.

The offeror may provide information on problems encountered on the identified contracts and the offeror's corrective actions.

Each offeror will be evaluated on its performance under existing and prior contracts for similar products or services. The Government is not required to contact all references provided by the offeror. Also, references other than those identified by the offeror may be contacted by the Government to obtain additional information that will be used in the evaluation of the offeror's past performance.

(21) Solicitation Provisions Incorporated by Reference, FAR 52.252-1 (February 1998)

This Solicitation incorporates the following solicitation provisions by reference with the same force and effect as if they were given in full text. Upon request, the CO will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full

text provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also the full text of a solicitation provision may be accessed electronically at this address: <http://www.arnet.gov/far/>.

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1):

- a. Submission of Offers in the English Language, FAR Clause 52.214-34, (April 1991).
- b. Submission of Offers in U.S. Currency, FAR Clause 52.214-35, (April 1991).
- c. Facilities Capital Cost of Money, FAR Clause 52.215-16 (October 1997)
- d. Order of Precedence - Uniform Contract Format, FAR Clause 52.215-8 (October 1997)
- e. Preaward On-Site Equal Opportunity Compliance Evaluation, (Over \$10,000,000) FAR Clause 52.222-24, (February 1999)

B. TECHNICAL PROPOSAL INSTRUCTIONS

NOTE – The Technical Proposal is limited to 25 single spaced pages. NIH biographical sketches of key personnel, listing of other federal and non federal support, appendices that include all protocols and a synopsis of related contract and grant experience are not included in the page limitation. Also note that there is no page limit on the size of the Business Proposal.

A detailed work plan must be submitted indicating how each aspect of the statement of work is to be accomplished. Your technical approach should be in as much detail as you consider necessary to fully explain your proposed technical approach or method. The technical proposal should reflect a clear understanding of the nature of the work being undertaken. The technical proposal must include information on how the project is to be organized, staffed, and managed. Information should be provided which will demonstrate your understanding and management of important events or tasks.

1. **Technical Discussions**

The technical discussion included in the technical proposal should respond to the items set forth below:

a. **Statement of Work**

(1) Objectives

State the overall objectives and the specific accomplishments you hope to achieve. Indicate the rationale for your plan, and relation to comparable work in progress elsewhere. Review pertinent work already published which is relevant to this project and your proposed approach. This should support the scope of the project as you perceive it.

(2) Approach

Use as many subparagraphs, appropriately titled, as needed to clearly outline the general plan of work. Discuss phasing of research and, if appropriate, include experimental design and possible or probable outcome of approaches proposed.

(3) Methods

Describe in detail the methodologies you will use for the project, indicating your level of experience with each, areas of anticipated difficulties, and any unusual expenses you anticipate.

(4) **Schedule**

Provide a schedule for completion of the work and delivery of items specified in the Statement of Work. Performance or delivery schedules shall be indicated for phases or segments, as applicable, as well as for the overall program. Schedules shall be shown in terms of calendar months from the date of authorization to proceed or, where applicable, from the date of a stated event, as for example, receipt of a required approval by the CO. Unless the RFP indicates that the stipulated schedules are mandatory, they shall be treated as desired or recommended schedules. In this event, proposals based upon the offeror's best alternative schedule, involving no overtime, extra shift or other premium, will be accepted for consideration.

b. **Personnel**

Describe the experience and qualifications of personnel who will be assigned for direct work on this program. Information is required which will show the composition of the task or work group, its general qualifications, and recent experience with similar equipment or programs. Special mention shall be made of direct technical supervisors and key technical personnel, and the approximate percentage of the total time each will be available for this program.

OFFERORS SHOULD ASSURE THAT THE PRINCIPAL INVESTIGATOR, AND ALL OTHER PERSONNEL PROPOSED, SHALL NOT BE COMMITTED ON FEDERAL GRANTS AND CONTRACTS FOR MORE THAN A TOTAL OF 100% OF THEIR TIME. IF THE SITUATION ARISES WHERE IT IS DETERMINED THAT A PROPOSED EMPLOYEE IS COMMITTED FOR MORE THAN 100% OF HIS OR HER TIME, THE GOVERNMENT WILL REQUIRE ACTION ON THE PART OF THE OFFEROR TO CORRECT THE TIME COMMITMENT.

(1) **Principal Investigator/Project Director**

List the name of the Principal Investigator/Project Director responsible for overall implementation of the contract and key contact for technical aspects of the project. Even though there may be co-investigators, identify the Principal Investigator/Project Director who will be responsible for the overall implementation of any awarded contract. Discuss the qualifications, experience, and accomplishments of the Principal Investigator/Project Director. State the estimated time to be spent on the project, his/her proposed duties, and the areas or phases for which he/she will be responsible. If the Principal Investigator proposed for this RFP is committed in excess of 100% of his/her time the proposal must include appropriate explanations.

(2) **Other Investigators**

List all other investigators/professional personnel who will be participating in the project. Discuss the qualifications, experience, and accomplishments. State the estimated time each will spend on the project, proposed duties on the project, and the areas or phases for which each will be responsible.

(3) **Additional Personnel**

List names, titles, and proposed duties of additional personnel, if any, who will be required for full-time employment, or on a subcontract or consultant basis. The technical areas, character, and extent of subcontract or consultant activity will be indicated and the anticipated sources will be specified and qualified. For all proposed personnel who are not currently members of the offeror's staff, a letter of commitment or other evidence of availability is required. A resume does not meet this requirement. Commitment letters for use of consultants and other personnel to be hired must include:

- The specific items or expertise they will provide.
- Their availability to the project and the amount of time anticipated.
- Willingness to act as a consultant.
- How rights to publications and patents will be handled.

(4) **Resumes**

Resumes of all key personnel are required. Each must indicate educational background, recent experience, specific or technical accomplishments, and a listing of relevant publications. Resumes must not exceed two pages.

2. Technical Evaluation

Proposals will be technically evaluated in accordance with the factors, weights, and order of relative importance as described in the Evaluation Factors for Contract Award (Attachment 3).

3. Additional Technical Proposal Information

- a. Proposals which merely offer to conduct a program in accordance with the requirements of the Government's scope of work will not be eligible for award. The offeror must submit an explanation of the proposed technical approach in conjunction with the tasks to be performed in achieving the project objectives.
- b. The technical evaluation is conducted in accordance with the weighted technical evaluation criteria by the initial review panel. This evaluation produces a numerical score (points) which is based upon the information contained in the offeror's proposal only.

4. Qualifications of the Offeror

- a) You are requested to submit a summary of your "General Experience, Organizational Experience Related to this RFP, Performance History and Pertinent Contracts."

(1) General Experience

General experience is defined as general background, experience and qualifications of the offeror. A discussion of proposed facilities which can be devoted to the project may be appropriate.

(2) **Organizational Experience Related to the RFP**

Organizational experience is defined as the accomplishment of work, either past or on-going, which is comparable or related to the effort required by this RFP. This includes overall offeror or corporate experience, **but not** the experience and/or past performance of individuals who are proposed as personnel involved with the Statement of Work in this RFP.

(3) **Performance History**

Performance history is defined as meeting contract objectives within **delivery** and **cost schedules** on efforts, either past or on-going, which is comparable or related to the effort required by this RFP.

(4) **Pertinent Contracts**

Pertinent contracts is defined as a listing of each related contract completed within the last three years or currently in process. The listing should include: 1) the contract number; 2) contracting agency; 3) contract dollar value; 4) dates contract began and ended (or ends); 5) description of contract work; 6) explanation of relevance of work to this RFP; 7) actual delivery and cost performance versus delivery and cost agreed to in the contract(s). For award fee contracts, separately state in dollars the base fee and award fee available and the award fee actually received. The same type of organizational experience and past performance data should be submitted.

(5) **Pertinent Grants**

List grants supported by the Government that involved similar or related work to that called for in this RFP. Include the grant number, involved agency, names of the grant specialist and the Science Administrator, identification of the work, and when performed.

You are cautioned that omission or an inadequate or inaccurate response to this very important RFP requirement could have a negative effect on the overall selection process. Experience and past performance are factors which are relevant to the ability of the offerors to perform and, while not a specific weighted evaluation factor, they are inherent in one or more technical evaluation criterion. Also, they may be used to conduct a relative assessment of offerors during the source selection process if the evaluation factors for contract award, in the specific RFP so indicate.

5. **Other Considerations**

Record and discuss specific factors not included elsewhere which support your proposal. Using specifically titled subparagraphs, items may include:

- (a) Any agreements and/or arrangements with subcontractor(s). Provide as much detail as necessary to explain how the Statement of Work will be accomplished within this working relationship.
- (b) Unique arrangements which none or very few organizations are likely to have which is advantageous for effective implementation of this project.
- (c) Equipment and unusual operating procedures established to protect personnel from hazards associated with this project.
- (d) Other factors you feel are important and support your proposed research.
- (e) Recommendations for changing reporting requirements or other deliverables if such changes would be more compatible with the offeror's proposed schedules.

C. **BUSINESS PROPOSAL INSTRUCTIONS**

1. **Basic Cost/Price Information**

The business proposal must contain sufficient information to allow the Government to perform a basic analysis of the proposed cost or price of the work. This information shall include the amounts of the basic elements of the proposed cost or price. These elements will include, as applicable, direct labor, fringe benefits, travel, materials, subcontracts, purchased parts, shipping, indirect costs and rate, fee, and profit.

2. **Cost and Pricing Data**

(a) **General Instructions**

(1) You must provide the following information on the first page of your pricing proposal:

- (i) Solicitation, contract, and/or modification number;
- (ii) Name and address of offeror, to include DUNS number;
- (iii) Name and telephone number of point of contact;
- (iv) Name of contract administration office (if available);
- (v) Type of contract action (that is, new contract, change order, price revision/redetermination, letter contract, unpriced order, or other);
- (vi) Proposed cost; profit or fee; and total;
- (vii) Whether you will require the use of Government property in the performance of the contract, and, if so, what property;
- (viii) Whether your organization is subject to cost accounting standards; whether your organization has submitted a CASB Disclosure Statement, and if it has been determined adequate; whether you have been notified that you are or may be in noncompliance with your Disclosure Statement or CAS, and, if yes, an explanation; whether any aspect of this proposal is inconsistent with your disclosed practices or applicable CAS, and, if so, an explanation; and whether the proposal is consistent with your established estimating and accounting principles and procedures and FAR Part 31, Cost Principles, and, if not, an explanation;

- (ix) The following statement: This proposal reflects our estimates and/or actual costs as of this date and conforms with the instructions in FAR15.403-5(b)(1) and Table 15-2. By submitting this proposal, we grant the CO and authorized representative(s) the right to examine, at any time before award, those records, which include books, documents, accounting procedures and practices, and other data, regardless of type and form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price;
- (x) Date of submission; and
- (xi) Name, title and signature of authorized representative.
- (b) In submitting your proposal, you must include an index, appropriately referenced, of all the cost or pricing data and information accompanying or identified in the proposal. In addition, you must annotate any future additions and/or revisions, up to the date of agreement on price, or an earlier date agreed upon by the parties, on a supplemental index.
- (c) As part of the specific information required, you must submit, with your proposal, cost or pricing data (that is, data that are verifiable and factual and otherwise as defined at FAR 15.401). You must clearly identify on your cover sheet that cost or pricing data are included as part of the proposal. In addition, you must submit with your proposal any information reasonably required to explain your estimating process, including--
- (1) The judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data; and
 - (2) The nature and amount of any contingencies included in the proposed price.
- (d) You must show the relationship between contract line item prices and the total contract price. You must attach cost element breakdowns for each proposed research objective, using the appropriate format prescribed in the "Formats for Submission of Line Item Summaries". You must furnish supporting breakdowns for each cost element, consistent with your cost accounting system.
- (e) When more than one contract line item is proposed, you must also provide summary total amounts covering all line items for each element of cost.
- (f) Whenever you have incurred costs for work performed before submission of a proposal, you must identify those costs in your cost/price proposal.
- (g) If you have reached an agreement with Government representatives on use of forward pricing rates/factors, identify the agreement, include a copy, and describe its nature.
- (h) As soon as practicable after final agreement on price or an earlier date agreed to by the parties, but before the award resulting from the proposal, you must, under the conditions stated in FAR 15.406-2, submit a Certificate of Current Cost or Pricing Data.

3. **Cost Elements**

Depending on your system, you must provide breakdowns for the following basic cost elements, as applicable:

(a) **Direct Labor**

Provide a time-phased (e.g. monthly, quarterly, etc.) breakdown of labor hours, rates, and cost by appropriate category, and furnish basis for estimates.

(b) **Fringe Benefits**

Show fringe benefits as a separate line item. Include the rates(s) and/or method of calculating fringe benefits. Provide a copy of your fringe benefit rate or organizational guidelines.

(c) **Materials and services**

Provide a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include raw materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity, and price. Conduct price analyses of all subcontractor proposals. Conduct cost analyses for all subcontracts when cost or pricing data are submitted by the subcontractor. Include these analyses as part of your own cost or pricing data submissions for subcontracts expected to exceed the appropriate threshold in FAR 15.403-4. Submit the subcontractor cost or pricing data as part of your own cost or pricing data as required in paragraph 2, below. These requirements also apply to all subcontractors if required to submit cost or pricing data.

(1) **Adequate Price Competition.** Provide data showing the degree of competition and the basis for establishing the source and reasonableness of price for those acquisitions (such as subcontracts, purchase orders, material order, etc.) exceeding, or expected to exceed, the appropriate threshold set forth at FAR 15.403-4 priced on the basis of adequate price competition. For interorganizational transfers priced at other than the cost of comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor, explain the pricing method (see FAR 31.205-26(e)).

(2) **All Other.** Obtain cost or pricing data from prospective sources for those acquisitions (such as subcontracts, purchase orders, material order, etc.) exceeding the threshold set forth in FAR 15.403-4 and not otherwise exempt, in accordance with FAR 15.403-1(b) (i.e., adequate price competition, commercial items, prices set by law or regulation or waiver). Also provide data showing the basis for establishing source and reasonableness of price. In addition, provide a summary of your cost analysis and a copy of cost or pricing data submitted by the prospective source in support of each subcontract, or purchase order that is the lower of either \$10,000,000 or more, or both more than the pertinent cost or

pricing data threshold and more than 10 percent of the prime contractor's proposed price. The CO may require you to submit cost or pricing data in support of proposals in lower amounts. Subcontractor cost or pricing data must be accurate, complete and current as of the date of final price agreement, or an earlier date agreed upon by the parties, given on the prime contractor's Certificate of Current Cost or Pricing Data. The prime contractor is responsible for updating a prospective subcontractor's data. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown, if priced based on cost. For interorganizational transfers priced at cost, provide a separate breakdown of cost elements. Analyze the cost or pricing data and submit the results of your analysis of the prospective source's proposal. When submission of a prospective source's cost or pricing data is required as described in this paragraph, it must be included along with your own cost or pricing data submission, as part of your own cost or pricing data. You must also submit any other cost or pricing data obtained from a subcontractor, either actually or by specific identification, along with the results of any analysis performed on that data.

(d) Indirect Costs

Indicate how you have computed and applied your indirect costs, including cost breakdowns. Show trends and budgetary data to provide a basis for evaluating the reasonableness of proposed rates. Indicate the rates used and provide an appropriate explanation.

(e) Special Equipment

If direct charge, list any equipment proposed including description, price, quantity, total price, purchase or lease, and the basis for pricing.

(f) Travel

Provide the cost of travel including destination, duration, purpose, per diem, transportation, and the basis for pricing.

(g) Other Costs

List all other costs not otherwise included in the categories described above (e.g., special tooling, computer and consultant services, preservation, packaging and packing, spoilage and rework, and Federal excise tax on finished articles) and provide bases for pricing.

(h) Royalties

If royalties exceed \$1,500, you must provide the following information on a separate page for each separate royalty or license fee:

- (1) Name and address of licensor.
- (2) Date of license agreement.
- (3) Patent numbers.

- (4) Patent application serial numbers, or other basis on which the royalty is payable.
- (5) Brief description (including any part or model numbers of each contract item or component on which the royalty is payable).
- (6) Percentage or dollar rate of royalty per unit.
- (7) Unit price of contract item.
- (8) Number of units.
- (9) Total dollar amount of royalties.
- (10) If specifically requested by the CO, a copy of the current license agreement and identification of applicable claims of specific patents (see FAR 27.204 and 31.205-37).

(i) Facilities Capital Cost of Money (Commercial Organizations, only)

When you elect to claim facilities capital cost of money as an allowable cost, you must submit Form CASB-CMF and show the calculation of the proposed amount (see FAR 31.205-10).

4. Formats for Submission of Line Item Summaries

The detailed breakdown shall be in the format as shown on the form **Breakdown of Proposed Estimated Cost (plus fee) and Labor Hours** (see Attachment 6 of the RFP). For each separate cost estimate, the offeror must furnish a breakdown by cost element as indicated above. In addition, summary total amounts shall be furnished. In the event the RFP cites specific line items, by number, a cost breakdown for each line item must be furnished.

To assist in the preparation of future cost estimates, the Projected Consumer Price Index may be accessed at URL: <http://rcb.nci.nih.gov/forms/cpi.htm>.

- 5. There is a clear distinction between submitting cost or pricing data and merely making available books, records, and other documents without identification. The requirement for submission of cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification, to the CO or an authorized representative. As later information comes into your possession, it should be submitted promptly to the CO in a manner that clearly shows how the information relates to the offeror's price proposal. The requirement for submission of cost or pricing data continues up to the time of agreement on price, or an earlier date agreed upon between the parties if applicable.
- 6. By submitting your proposal, you grant the CO or an authorized representative the right to examine records that formed the basis for the pricing proposal. That examination can take place at any time before award. It may include those books, records, documents, and other types of factual information (regardless of form or whether the information is specifically referenced or included in the proposal as the basis for pricing) that will permit an adequate evaluation of the proposed price. [Note to Offerors of RFPs using "JUST IN TIME" procedures: Data substantiating the costs or prices proposed (i.e. payroll documentation, vendor quotes, invoice price, etc.) shall not be submitted with the initial proposal. This information will be requested from the offeror during the negotiation process. The initial proposal need only indicate from what source the proposed costs and prices are substantiated.]

7. **Requirements for Cost or Pricing Data or Information Other than Cost and Pricing Data** (FAR Clause 52.215-20 (October 1997))

a) Exceptions from cost or pricing data.

- (1) In lieu of submitting cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.
 - (i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting officer.
 - (ii) Commercial item exception. For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold in the commercial market that is adequate for evaluating the reasonableness of the price for this acquisition. Such information may include –
 - (a) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price or recent sales in quantities similar to the proposed quantities;
 - (b) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market;
 - (c) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the scheduled item.
- (2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.

(b) Requirements for cost or pricing data. If the offeror is not granted an exception from the requirement to submit cost or pricing data, the following applies:

- (1) The offeror shall prepare and submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.
- (2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

8. Total Compensation Plan - Instructions

**** *This document is INCLUDED in the "Just In Time" procedures.* ****

- a) Total compensation (salary and fringe benefits) of professional employees under service contracts may, in some cases, be lowered by recompetition of these contracts. Lowering of compensation can be detrimental in obtaining the necessary quality of professional services needed for adequate performance of service contracts. It is, therefore, in the best interest of the Government that professional employees, as defined in 29 CFR Part 541, be properly compensated in these contracts. All offerors INCLUDED IN DISCUSSIONS WILL BE REQUIRED TO SUBMIT a "Total Compensation Plan" (salaries and fringe benefits) for these professional employees for evaluation purposes.
- b) The Government will evaluate the Total Compensation Plan to ensure that this compensation reflects a sound management approach and an understanding of the requirements to be performed. It will include an assessment of the offeror's ability to provide uninterrupted work of high quality. The total compensation proposed will be evaluated in terms of enhancing recruitment and retention of personnel and its realism and consistency with a total plan for compensation (both salaries and fringe benefits).
- c) Evaluation for award, therefore, will include an assessment of the Total Compensation Plan submitted by each offeror.

9. Total Compensation Plan - Evaluation

a) Total Compensation Plan (Professional Employees)

In establishing compensation levels for professional employees, the total compensation (both salaries and fringe benefits) proposed shall reflect a clear understanding of the requirements of the work to be accomplished and the suitability of the proposed compensation structure to obtain and retain qualified personnel to meet mission objectives. The salary rates or ranges must recognize the distinct differences in professional skills and the complexity of varied disciplines as well as job difficulty. Proposals offering total compensation levels less than currently being paid by the predecessor Contractor for the same work will be evaluated, in addition to the above, on the basis of maintaining program continuity, uninterrupted work of high quality, and availability of required competent professional employees. Offerors are cautioned that instances of lowered compensation for essentially the same professional work may be

considered a lack of sound management judgment in addition to indicating a lack of understanding of the requirement.

b) Cost (Professional Compensation)

Proposals which are unrealistically low or do not reflect a reasonable relationship of compensation to the professional job categories so as to impair the Contractor's ability to recruit and retain competent professional employees, may be viewed as reflecting a failure to comprehend the complexity of the contract requirements. The Government is concerned with the quality and stability of the work force to be employed on this contract. The compensation data required will be used in evaluation of the offeror's understanding of the contract requirements.

c) Other (Labor Relations)

An assessment of the potential for adverse effect upon performance and maintenance of the required number of professional employees with requisite skills resulting from an unrealistically low compensation structure will also be made.

d) Federal Acquisition Regulation Clauses incorporated by Reference

FAR Clause 52.222-46, Evaluation of Compensation for Professional Employees (FEBRUARY 1993).

10. Property, Equipment, Facilities

- (a) It is DHHS policy that Contractors will provide all equipment and facilities necessary for performance of contracts. Exception may be granted to furnish Government-owned property, or to authorize purchase with contract funds, only when approved by the CO. If the offeror is proposing that the Government provide any equipment, other than that specified under Government Furnished Property in the RFP, the proposal must include comprehensive justification which includes, in addition to the description and estimated cost of each item:
 - (1) An explanation that the item is for a special use essential to the direct performance of the contract and the item will be used exclusively for the purpose. Office equipment such as desks, office machines, etc., will not be provided under a contract except under very exceptional circumstances.
 - (2) No practical or economical alternative exists (e.g., rental, capital investment) that can be used to perform the work.
- (b) The offeror shall identify Government-owned property in its possession and/or Contractor titled property acquired from Federal funds, which it proposes to use in the performance of the prospective contract.
- (c) If an offeror intends to use existing Government-owned facilities in the performance of this proposed contract, the following shall be furnished with the offer: (1) Description and value of all Government production and research property which the offeror or his/her anticipated subcontractors propose to use on a rent-free basis and the cognizant

Government Contract Number; (2) Written permission of the CO having cognizance of the property for use of that property without charges; (3) Amount of use (in months) to be made of such property, and (4) Amount of rent which would otherwise be charged for such use, computed in accordance with applicable procurement regulations.

- (d) The management and control of any Government property shall be in accordance with DHHS Publication (OS) 686 entitled, "Contractor's Guide for Control of Government Property (1990)," a copy of which will be provided upon request.

11. **Royalties**

The offeror shall furnish information concerning royalties which are anticipated to be paid in connection with performance of work under the proposed contract.

12. **Submission of Electronic Funds Transfer Information with Offer, FAR Clause 52.232-38 (MAY 1999)**

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232-34, Payment by Electronic Funds Transfer--Other than Central Contractor Registration.

- (1) The solicitation number (or other procurement identification number).
- (2) The offeror's name and remittance address, as stated in the offer.
- (3) The signature (manual or electronic, as appropriate), title, and telephone number of the offeror's official authorized to provide this information.
- (4) The name, address, and 9-digit Routing Transit Number of the offeror's financial agent.
- (5) The offeror's account number and the type of account (checking, savings, or lockbox).
- (6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.
- (7) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on-line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

13. **Financial Capacity**

The offeror shall indicate if it has the necessary financial capacity, working capital, and other resources to perform the contract without assistance from any outside source. If not, indicate the amount required and the anticipated source.

14. **Incremental Funding**

An incrementally funded contract is a contract in which the total work effort is to be performed over a multiple year period and funds are allotted, as they become available, to cover discernible phases or increments of performance. The incremental funding

technique allows for contracts to be awarded for periods in excess of one year even though the total estimated amount of funds expected to be obligated for the contract are not available at the time of the contract award. If this requirement is specified elsewhere in this RFP, the offeror shall submit a cost proposal for each year. In addition, the following provisions are applicable:

HHSAR 352.232-75, Incremental Funding (January 2001)

It is the Government's intention to negotiate and award a contract using the incremental funding concepts describe in the clause entitled Limitation of Funds. Under the clause, which will be included in the resultant contract, initial funds will be obligated under the contract to cover the first year of performance. Additional funds are intended to be allotted to the contract by contract modification, up to and including the full estimated cost of the contract, to accomplish the entire project. While it is the Government's intention to progressively fund this contract over the entire period of performance up to and including the full estimated cost, the Government will not be obligated to reimburse the Contractor for costs incurred in excess of the periodic allotments, nor will the Contractor be obligated to perform in excess of the amount allotted.

The "Limitation of Funds" clause to be included in the resultant contract shall supersede the "Limitation of Cost" clause found in the General Clauses.

15. **Facilities Capital Cost of Money, FAR 52.215-16, (October 1997)**
(This is applicable if you are a commercial organization.)

Facilities capital cost of money (see FAR 15.408(h)) will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10(a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective contractor to propose facilities capital cost of money in its offer.

If the prospective contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

(End of Provision)

If the offeror elects to claim this cost, the offeror shall specifically identify or propose it in the cost proposal for the contract by checking the appropriate box below.

- ☐ [] The prospective contractor has specifically identified or proposed facilities capital cost of money in its cost proposal and elects to claim this cost as an allowable cost under the contract. Submit Form CASB-CMF (see FAR 31.205-10).
- ☐ [] The prospective contractor has not specifically identified or proposed facilities capital cost of money in its proposal and elects not to claim it as an allowable cost under this contract.

16. **Subcontractors**

If subcontractors are proposed, please include a commitment letter from the subcontractor detailing:

- (a) Willingness to perform as a subcontractor for specific duties (list duties).
- (b) What priority the work will be given and how it will relate to other work.
- (c) The amount of time and facilities available to this project.
- (d) Information on their cognizant field audit offices.
- (e) How rights to publications and patents are to be handled.
- (f) A complete cost proposal in the same format as the offeror's cost proposal.

Note: Organizations that plan to enter into a subcontract with an educational concern under a contract awarded under this RFP should refer to the following Web Site for a listing of clauses that are required to be incorporated in Research and Development (R&D) subcontracts with educational institutions:

<http://ocm.od.nih.gov/contracts/rfps/FDP/FDPclausecover.htm>

17. Representations and Certifications

One copy of the Representations and Certifications shall be completed and signed by an official authorized to bind your organization. Additionally, a completed copy of the Representations and Certifications shall be submitted from any proposed subcontractor. (See Attachment 6 of this RFP.)

PROPOSAL INTENT RESPONSE SHEET

PLEASE REVIEW THE ATTACHED RFP. FURNISH THE INFORMATION REQUESTED BELOW AND RETURN THIS PAGE ON OR BEFORE September 17, 2001. YOUR EXPRESSION OF INTENT IS NOT BINDING BUT WILL GREATLY ASSIST US IN PLANNING FOR PROPOSAL EVALUATION. CHECK ONLY ONE BOX.

☐ DO INTEND TO SUBMIT A PROPOSAL

☐ DO NOT INTEND TO SUBMIT A PROPOSAL FOR THE FOLLOWING REASONS:

TYPED NAME AND TITLE: _____

INSTITUTION: _____

SIGNATURE: _____

TELEPHONE NO.: _____

EMAIL ADDRESS: _____

FAX NO. _____

DATE: _____

COLLABORATORS/CONSULTANTS - Provide name(s) and institution(s): (Continue list on additional pages if necessary)

TO: National Institute of Mental Health
Contracts Management Branch
Attn: Robert D. Barnie
6001 Exec. Blvd., Rm. 6107, MSC 9603
Bethesda, MD 20892-9603
FAX (301) 443-0501
Rb245s@nih.gov

APPLICABLE RFP REFERENCES

- A. The following general clauses and provisions are applicable to this specific RFP depending on your organizational status: Negotiated Cost-Reimbursement Contract with an Educational Institution, Negotiated Cost-Reimbursement Contract with a Non-Profit or, Negotiated Cost-Reimbursement Research and Development Contract. The clauses are located in the file "General Clauses" at URL: <http://amb.nci.nih.gov/clauses/clauses.html> .
- B. The following items are applicable to this specific RFP and are located in the file entitled (except as noted) FORMS, FORMATS AND ATTACHMENTS at: <http://ocm.od.nih.gov/contracts/rfps/Forms1.htm> .

SUBMIT WITH TECHNICAL PROPOSAL (with original and every copy of technical proposal)

1. Technical Proposal Cover Sheet
2. Summary of Current and Proposed Activities
3. Technical Proposal Cost Information

SUBMIT WITH BUSINESS PROPOSAL:

1. Proposal Summary and Data record, NIH-2043, with every copy of business proposal.
2. Business Proposal Cost Information (Use form entitled "Breakdown of Proposed Estimated Cost (plus fee) and Labor Hours" which is located at <http://rcb.nci.nih.gov/appl/rfp/17004/costfrm.htm>).
3. Disclosure of Lobbying Activities, OMB SF-LLL, only one completed and signed original
4. Representations and Certifications - Negotiated Contract, only one completed and signed copy

OTHER - TO BE SUBMITTED LATER:

1. Certificate of Current Cost or Pricing Data, NIH-1397, to be submitted with FPR, as required by the CO
2. DHHS Small, Small Disadvantaged, HUBZone and Women-Owned Small Business Subcontracting Plan, to be submitted as directed by the CO

ANTICIPATED TO BE INCLUDED AS CONTRACT ATTACHMENTS:

1. Invoice/Financing Requests Instructions for NIH Cost-Reimbursement Type Contracts, NIH(RC)-1
2. NIH 2706, Financial Report of Individual Project/Contract, the form with instructions
3. Procurement of Certain Equipment, NIH(RC)-7
4. Report of Accountable Personal Property (HHS 565)

C. The Sample Contract Format is located in the file entitled, RFP FORMS, FORMATS AND ATTACHMENTS at <http://ocm.od.nih.gov/contracts/rfps/Forms1.htm> . Supplemental information pertaining to Section G of the Sample Contract Format include the following:

1. **Section G, "Contract Administration Data" paragraph entitled "Invoice Submission" is amended to read as follows:**

Invoice Submissions/Contract Financing Request

Invoice/Financing Request Instructions for NIH Cost-Reimbursement Type Contracts, NIH(RC)-1, are attached and made part of this contract. The instructions and the following directions for the submission of invoices/financing request must be followed to meet the requirements of a “proper” payment request pursuant to FAR 32.9. Invoice/financing requests shall be submitted as follows:

- a. An original and two copies to the following designated billing office:

If hand-delivered or delivery Service

Contracting Officer
Contracts Management Branch, ORM
National Institute of Mental Health
6001 Executive Boulevard
Room 6107, MSC 9603
Rockville, Maryland 20852

If using U.S. Postal Service

Contracting Officer
Contracts Management Branch, ORM
National Institute of Mental Health
6001 Executive Boulevard
Room 6107, MSC 9603
Bethesda, Maryland 20892-9603

Inquiries regarding payment of invoices should be directed to the designated billing office (301) 443-2696.

- b. At a minimum, the Contractor agrees to include the following information on each invoice:

1. Contractor’s name and invoice date,
2. NIMH's Contract number, or other authorization for delivery of property and/or services
3. Description, cost or price, and quantity of property and/or services actually delivered or rendered,
4. Shipping and payment terms,
5. Other substantiating documentation or information as required by the contract (see paragraph G.3.c, “NIMH Supplemental Billing Instructions” below,
6. Name where practicable, title, phone number, and complete mailing address of responsible official to whom payment is to be sent.

- c. NIMH Supplemental Billing Instructions

1. The contractor agrees to provide, as applicable, a detailed breakdown on each invoice of the following cost categories:

- (a) Direct Labor - List individuals by name, title/position, hourly/annual rate, level of effort, and amount claimed.
- (b) Fringe Benefits - Cite rate and amount
- (c) Overhead - Cite rate and amount
- (d) Materials & Supplies - Include detailed breakdown.
- (e) Travel - Identify travelers, dates, destination, purpose of trip, and amount. Cite COA, if appropriate.
- (f) Consultant Fees - Identify individuals and amounts.
- (g) Subcontracts - Attach subcontractor invoice(s). (Should be in same format and detail as required of the Prime Contractor.) Include COA Letter Number if applicable.

- (h) Equipment - Cite authorization and amount.
- (i) G&A - Cite rate and amount.
- (j) Total Cost
- (k) Fee (if applicable)
- (l) Total Cost & Fee

Monthly invoices must include the cumulative total expended to date, adjusted (as applicable) to show any amounts suspended or disallowed by the Government.

2) The contractor agrees to immediately notify the contracting officer in writing if there is an anticipated overrun (any amount) or unexpended balance (greater than 10 percent) of the amount allotted to the contract, and the reasons for the variance. Also refer to the requirements of the Limitation of Funds and Limitation of Cost Clauses in the contract.

2. Section G, “Contract Administration Data” the paragraph entitled “Post Award Evaluation of Contractor Performance” is amended to add:

Electronic Access to Contractor Performance Evaluations

Contractors that have Internet capability may access evaluations through a secure Web Site for review and comment by completing the registration form that can be obtained at the following address:

http://ocm.od.nih.gov/cdmp/cps_contractor.htm

The registration process requires the contractor to identify an individual that will serve as a primary contact and who will be authorized access to the evaluation for review and comment. In addition, the contractor will be required to identify an alternate contact who will be responsible for notifying the cognizant contracting official in the event the primary contact is unavailable to process the evaluation within the required 30-day time frame.

ATTACHMENT 7 to STREAMLINED RFP No. NIMH-01-DN-0018

REFERENCE MATERIALS

MOUSE MUTAGENESIS AND PHENOTYPING: NERVOUS SYSTEM AND BEHAVIOR

Release Date: March 31, 1999

RFA: MH-99-007

P.T.

National Institute of Mental Health
National Institute of Neurological Disorders and Stroke
National Institute on Aging
National Institute on Deafness and Other Communication Disorders
National Institute on Drug Abuse
National Eye Institute
National Institute on Alcohol Abuse and Alcoholism

Public Briefing Date: June 21, 1999

Letter of Intent Receipt Date: August 2, 1999

Application Receipt Date: October 14, 1999

PURPOSE

The purpose of this request for applications (RFA) is to establish facilities for large-scale mutagenesis and phenotyping of nervous system functions and complex behaviors in the laboratory mouse. Neuroscience-focused mutagenesis and phenotyping facilities established by this RFA are expected to serve as a national resource by producing a bank of mouse strains that harbor a wide range of mutations affecting murine nervous system function and behavior. Data and biomaterials produced in projects supported under this RFA will be made widely available to the scientific community.

A companion RFA entitled, "Phenotyping the Mouse Nervous System and Behavior: MH-99-006," available at <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-99-006.html>, solicited applications that focused on the development of standardized criteria and high-throughput phenotyping assays to assess a comprehensive range of murine nervous system functions and complex behaviors. These assays will be widely distributed to the scientific community and available for application in projects supported under this RFA.

The activities of facilities established under this RFA will be coordinated with those supported under RFA HD-99-007, "Mouse Mutagenesis and Phenotyping: Developmental Defects," available at <http://grants.nih.gov/grants/guide/rfa-files/RFA-HD-99-007.html>, and with those of future related facilities. Further information about NIH initiatives on mouse genomics and genetics resources are available at <http://www.nih.gov/science/mouse/>.

HEALTHY PEOPLE 2000

The Public Health Service (PHS) is committed to achieving the health promotion and disease prevention objectives of "Healthy People 2000," a PHS-led national activity for setting priority areas. This RFA - Mouse Mutagenesis and Phenotyping: Nervous System and Behavior - is related to one or more priority areas. Applicants may obtain a copy of "Healthy People 2000" at <http://www.crisny.org/health/us/health7.html>.

ELIGIBILITY REQUIREMENTS

Applications may be submitted by domestic, for-profit and non-profit organizations, public and private, such as universities, colleges, hospitals, laboratories, units of State and local governments, and eligible agencies of the Federal government. Applications will not be accepted from foreign institutions. Racial/ethnic minority individuals, women, and persons with disabilities are encouraged to apply as Principal Investigators (PIs).

MECHANISM OF SUPPORT

This RFA will use the National Institutes of Health (NIH) cooperative agreement (U01) award mechanism, an "assistance" mechanism, which is distinguished from a regular research grant in that substantial scientific and/or programmatic interaction between NIH program staff and the awardees is anticipated. The cooperative agreement is used when participation by NIH staff is warranted to support and/or stimulate the recipient's activity by involvement in or otherwise working jointly with the award recipient in a partner role; NIH staff will not assume direction, prime responsibility, or a dominant role in the activity. Details of the responsibilities, relationships, and governance of the studies funded under cooperative agreements are discussed later in this document under "Terms and Conditions of Award." If there are multiple facilities to be supported, each will be awarded as a separate U01.

For administrative reasons all applications received in response to this solicitation will be initially assigned to NIMH. After discussions among the participating NIH Institutes, applications will be reassigned to the Institute(s) that is programmatically most appropriate. Because the scope of some of the research projects proposed in response to this RFA encompasses the interests of several Institutes, applications may receive dual assignments based on established PHS guidelines. Awards will be made and managed by NIMH and/or the other participating Institutes.

FUNDS AVAILABLE

This RFA is a one-time solicitation. It is anticipated that \$5.5 million (including direct and indirect costs) will be available for this initiative in Fiscal Year 2000, during which it is anticipated that 2 to 4 awards will be made. The total project period for an application submitted in response to this RFA may not exceed 5 years. Awards pursuant to this RFA are contingent upon the availability of funds for this purpose. The amount of funding for this initiative may be increased if a large number of highly meritorious applications

are received and if funds are available. Only applications that are found to be of the highest scientific merit will be considered for funding, and not all of the funding will be spent if there are not enough highly meritorious applications. Funding in future years will be subject to the availability of funds.

For the purpose of accomplishing the goals of this RFA, the facility may include investigators at more than one site, and subcontracts may be included in the budget to support investigators at sites other than the awardee institution.

RESEARCH OBJECTIVES

Background

With the impending elucidation of the complete sequence of both the mouse and human genomes, the next challenge will be to conduct large-scale functional analyses of these genomes to greatly enhance our understanding of mammalian biology. The laboratory mouse plays a pivotal role in human functional genomics, insofar as mouse strains carrying mutations have provided useful models for human diseases. Despite an apparent large collection of mouse mutations, the genetic bases of nervous system functions and complex behaviors are still poorly understood. This is in part true because there have not been systematic, large-scale efforts to identify mutations across the genome via systematic mutagenesis, and comprehensive phenotypic and genetic analyses of the resulting mouse strains.

Creation of additional genomic and genetic resources to facilitate functional analysis of murine biology is of widespread interest, and will make the mouse an even more useful model for the research community. In order to help define and establish priorities for generating such resources, the NIH Director convened a meeting of a distinguished group of scientists in March 1998, and a follow-up meeting in October 1998. Summaries of the two meetings can be found at <http://www.nih.gov/welcome/director/reports/mgenome.htm> and <http://www.nih.gov/welcome/director/reports/mgenom3.htm> (links to these summaries, as well as all relevant information regarding NIH initiatives on mouse genomics and genetics resources, are available at <http://www.nih.gov/science/mouse/>). A recent article (J. Battey et al., *Nature Genetics* 21:73, 1999, available at <http://www.nih.gov/science/mouse/reports/actionplan.html>) summarizes a proposed action plan by NIH for implementation of these recommendations.

Large-scale, genome-wide mutagenesis is a powerful approach for the analysis of gene function, and has historically played a major role in the evolution of our understanding of the biology of viruses, bacteria, fungi, the nematode, *Caenorhabditis elegans*, the fruit fly, *Drosophila melanogaster*, and most recently, the zebrafish, *Danio rerio*. In all three of the metazoan species so studied, genome-wide mutagenesis has made important contributions to our understanding of the development and cellular functions of the nervous system. Two routes, phenotype-driven and genotype-type driven, are currently being used to develop large-scale mutagenesis efforts. Phenotype-driven approaches typically utilize pseudo-randomly acting chemical agents such as N-ethyl-N-nitrosourea (ENU), procarbazine, or chloroambucil, to generate mice with

phenotypes of interest. Recovery of novel phenotypes is a starting point from which the relevant genes and biochemical, anatomical and physiological pathways are subsequently elucidated. Although considerable effort is needed to find the genes underlying novel phenotypes in mice, this approach has been successfully used to identify genes encoding leptin, and novel genes involved in genetic deafness and circadian rhythms.

This RFA will establish neuroscience-focused facilities for large-scale, efficient, whole-genome mutagenesis and phenotyping, in order to promote the systematic and comprehensive functional analysis of neurobiological and behavioral phenotypes in the mouse. Such facilities will create and maintain for distribution validated protocols for mutagenesis and phenotypic characterization, a collection of mutant mouse strains and databases containing phenotypic and genetic data on these strains. These resources will provide a platform from which hypothesis-driven research can be developed to gain a more comprehensive understanding of the molecular and genetic bases underlying nervous system function and complex behavior in mammals. Projects supported under this RFA will complement those supported under RFA HD-99-007, which will focus on genes that affect murine embryonic and post-embryonic development.

Scope and Objectives

Projects supported under this RFA will conduct genome-wide mutagenesis and high-throughput phenotyping of genetically altered mice. These mutant animals, along with embryos and/or sperm, will be made available for wide distribution to the scientific community. Each of the following areas are of primary importance and should be explicitly addressed in the application:

- o Utilization of a whole-genome approach to mutagenesis that is phenotype-driven, genotype-driven, or a combination of the two. The strategy must enable identification of both dominant and recessive mutations.
- o Initial, high-throughput characterization of mutant phenotypes relevant to nervous system function and behavior.
- o Focused phenotypic characterization of mutant mouse strains to screen for alterations in two or three domains of nervous system function and behavior (see below).
- o Development and maintenance of a database of all phenotypic data generated from mutants.
- o Maintenance and provision of animals, embryos, and/or sperm to: (1) one of the facilities supported under this RFA, which may receive supplemental funds under competitive peer-review to distribute these biomaterials to the wider scientific community after projects solicited under this RFA are funded; and/or (2) another NIH-designated facility (e.g., a National Center for Research Resources (NCRR)-sponsored Mutant Mouse Regional Resource Center as described in RFA RR-99-001 at <http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-99-001.html>).

- o State-of-the-art procedures that will ensure distribution of pathogen-free mutant mice, embryos, and/or sperm.
- o A proposed sharing plan to insure that mutant mice, sperm, embryos, phenotyping assays, and phenotypic data for all mutant strains are widely available to the scientific community.
- o NIH expects to make a Determination of Exceptional Circumstances (DEC) to eliminate the potential for patents on mutant mice, sperm, and embryos. The application should include a proposed plan addressing if, or how, the PI and recipient institution will exercise their intellectual property rights regarding other patentable research resources not covered under the DEC, such as phenotyping assays, mutagenesis protocols, and instrumentation produced in projects funded under this RFA (these issues are addressed below under OTHER SPECIAL REQUIREMENTS).
- o A proposed plan to permit guest investigators not associated with the facility to make use of the facility to screen for, and/or to examine, alterations in nervous system function and behavior not otherwise being studied at the facility. Funding for such additional projects would come from other sources.

Applications should utilize pre-existing high-throughput phenotyping assays and/or newly developed high-throughput assays (e.g., those developed in projects funded under RFA MH-99-006) to characterize mutant mouse strains. It is expected that each facility supported under this RFA will conduct screens of multiple phenotypic domains of nervous system functions or complex behaviors (see below). Each screen should include several assays that collectively measure multiple components of the phenotypic domain under investigation. Domains to be screened may include, but are not limited to, the following:

- o Complex traits related to normal or abnormal nervous system function and behavior, including but not limited to the following: emotion, attention, cognition, perception, concentration, sensation, learning, memory, reproductive and parenting behaviors, social behavior, circadian rhythms, grooming, impulse control, appetite, hedonic capacity, weight loss/gain, energy level, and peripheral sensory and autonomic nervous system function.
- o Neurological symptoms including ataxia, dystonia, seizures, paralysis, rigidity, tremor, cognitive impairment, motor tics, deficits in sensory, motor, and cognitive function following ischemic insult, neurotoxic insult, spinal cord injury, head injury, or nerve trauma.
- o Motor behavior, including measures of strength, motor control and coordination, and cognitive aspects of motor planning.
- o Acute and chronic sensitivity to neuropathic and inflammatory pain.
- o Visual phenotypes including, but not limited to, the following: retinal degeneration, cataract, cornea dystrophy, glaucoma, and abnormalities affecting sensory, plasticity and motor functions in the visual system.

- o Phenotypes that reflect alterations (i.e., impairment, distortion, or hypersensitivity) in sensory function including, but not limited to, the following: hearing and susceptibility to noise-induced hearing loss, balance and vestibular function, olfaction (including assays for neonatal function), vomeronasal function, and taste.
- o Behavioral traits related to alcohol ingestion, including but not limited to the following: alcohol drinking preference, alcohol-induced ataxia and locomotor activation, acute and chronic alcohol withdrawal, alcohol-induced conditioned place preference and conditioned taste aversion, operant responding for an alcohol reward, acute behavioral tolerance to alcohol, and alcohol-induced anxiolysis.
- o Phenotypes that undergo alterations with aging including, but not limited to, the following: learning, memory and cognition; sensory and motor function; sleep and circadian rhythms; glial structure and function; blood brain barrier structure and function; regional brain volume; susceptibility or resistance to neurodegeneration, neurotoxicity, and oxidative stress; and biochemical and physiological measures of nervous system function.
- o Behavioral traits related to the taking and seeking of drugs of abuse, which model aspects of drug addiction and co-morbid behaviors. These include, but are not limited to the following: drug preference; conditioned place preference; acquisition, maintenance, extinction, and reinstatement of drug taking behavior; narrowing of behavioral repertoires; and drug sensitization, tolerance, and withdrawal.
- o Behavioral abnormalities that model those found in mental disorders including, but not limited to, the following: attention-deficit hyperactivity disorder, autistic disorder, bipolar disorder, depression, eating disorders, obsessive-compulsive disorder, panic disorder, schizophrenia and other psychotic disorders, sleep disorders, and Tourette syndrome.
- o Behavioral, neurological, and sensory phenotypes limited to specific stages of development or to specific stages of the life span, such as neurodegenerative disorders in early development or aging.
- o High-throughput methods for the following: structural and functional characterization of the central and peripheral nervous systems in living animals through fMRI, PET, and other neuroimaging techniques or through evaluation of electrophysiological parameters, such as conduction velocity, EEG or long-term potentiation.

SPECIAL REQUIREMENTS FOR COOPERATIVE AGREEMENTS

I. Definitions

ARBITRATION PANEL: A panel that would be formed to arbitrate scientific or programmatic disagreement, should any arise, between award recipients and NIH

within the scope of the award.

AWARDEE: The institution to which a cooperative agreement is awarded.

COOPERATIVE AGREEMENT: An assistance mechanism in which there is anticipated substantial NIH programmatic involvement with the recipient organization during the performance of the planned activity.

PRINCIPAL INVESTIGATOR (PI): The researcher who assembles the project, submits an application in response to this RFA, and assumes responsibility for the overall performance of the project. The PI will coordinate project activities scientifically and administratively.

NIH PROGRAM DIRECTOR: A scientist of the NIH program staff who serves on a rotating basis to represent the 7 NIH Institutes sponsoring this RFA. The NIH Program Director has substantial scientific/programming involvement.

NEUROSCIENCE STEERING COMMITTEE (NSC): A committee that is the main governing board of all of the mutagenesis and phenotyping facilities funded under this RFA, and the committee through which the NIH interacts and collaborates with the facilities. Membership includes the NIH Program Director(s), the PI of each awarded cooperative agreement, and three scientists with relevant expertise who are not affiliated with any of the funded projects.

MOUSE GENOMICS & GENETICS SCIENTIFIC PANEL (MSP): A committee that is advisory to NIH. MSP ensures coordination among projects funded under this RFA and RFA HD-99-007, and evaluates their progress in relation to the evolving goals for trans-NIH initiatives on mouse genetics and genomics.

II. Terms and Conditions of Award

The following Terms and Conditions will be incorporated into the award statement. The following special terms of award are in addition to, and not in lieu of, otherwise applicable OMB administrative guidelines, HHS grant administration regulations at 45 CFR Parts 74 and 92 (Part 92 is applicable when State and local Governments are eligible to apply), and other HHS, PHS, and NIH grant administration policies:

1. The administrative and funding instrument used for this program will be the U01, an "assistance" mechanism (rather than an "acquisition" mechanism), in which substantial NIH scientific and/or programmatic involvement with the awardees is anticipated during performance of the activities. Under the cooperative agreement, the NIH purpose is to support and/or stimulate the recipients' activities by involvement in and otherwise working jointly with the award recipients in a partnership role. The NIH purpose is not to assume direction, prime responsibility, or a dominant role in the activities. Consistent with this concept, the dominant role and prime responsibility resides with the awardees for the project as a whole, although specific tasks and activities may be shared among the awardees and NIH program staff.

2. PI Rights and Responsibilities

The PI will coordinate project activities scientifically and administratively at the awardee institution. The PI will have primary responsibility for defining the details for the projects within the guidelines of this RFA, and for performing all scientific activities. The PI will agree to accept the close coordination, cooperation, and participation of the Program Director(s), Neuroscience Steering Committee (NSC), and Mouse Genomics & Genetics Scientific Panel (MSP) in those aspects of scientific and technical management of the project as described below. Specifically, the PI will:

- o Determine experimental approaches, design protocols, direct experiments, and work cooperatively to set project milestones, in consultation with NIH program staff and NSC.
- o Release data according to plans and publish results, as agreed upon by NIH program staff and NSC.
- o Submit periodic progress reports in a standard format, as agreed upon by NSC.
- o Accept and implement the common guidelines and procedures approved by NSC and MSP.
- o Share with other mutagenesis and phenotyping facilities mutants that may be of interest to those facilities, as directed by NSC and MSP.
- o Be aware of mutants that the other mutagenesis and phenotyping facilities are producing, and be prepared to accept them for initial screening and/or focused characterization, as directed by NSC and MSP.
- o Solicit the views of the broad neuroscience and behavioral research communities for the phenotypes and/or genotypes of interest.
- o Participate in NSC meetings (budget requests should include travel funds for the PI and other critical staff to attend NSC meetings in the metropolitan Washington, DC area at least twice per year).

3. NIH Program Staff Responsibilities

The NIH Program Director(s) will have substantial scientific/ programmatic involvement during the conduct of this activity through technical assistance, advice, and coordination. This includes functioning as a peer with the PIs, facilitating the partnership relationship between NIH and the neuroscience-focused mutagenesis and phenotyping facilities funded under this RFA, helping to maintain the overall scientific balance in the program commensurate with new research and emerging research opportunities, and ensuring that the activities of the neuroscience-focused mutagenesis and phenotyping facilities are consistent with the missions of the participating Institutes.

The role of NIH will be to facilitate and not to direct activities. It is

anticipated that decisions will be reached by consensus of the PIs and that NIH staff will be given the opportunity to offer input to this process. One to two NIH Program Directors shall participate as members of NSC. NIH staff will have a total of one vote. In order to separate the functions of the Program Director(s) from scientific stewardship functions (e.g., review of annual progress report, decisions about permitting carryover, re-budgeting, administrative supplements, etc.) for each facility, the Project Officers for the facilities funded under this RFA will not serve on NSC as Program Director(s).

Specifically, the NIH Program Director(s) will:

- o Provide relevant scientific expertise and overall knowledge.
- o Participate with other NSC members in the group process of setting research priorities and milestones, deciding optimal research approaches and protocol designs, and contributing to the adjustment of research protocols or approaches as warranted. The Program Director(s) will assist and facilitate the group process and not direct it.
- o Serve as administrative liaison to MSP, attending MSP meetings as a non-voting member, to help coordinate activities of facilities funded under this RFA with those funded under RFA HD-99-007 and other NIH mouse genomics and genetics initiatives. The Program Director(s) will also coordinate the activities of facilities funded under this RFA with other US and international efforts.
- o Provide information about ongoing NIH-supported research and resource collections.
- o Appoint the NSC Chair based on a recommendation from NSC committee members.
- o Attend NSC meetings as one voting member, and assist to develop operating guidelines, quality control procedures, and consistent policies for dealing with recurrent situations that require coordinated action. The Program Director(s) must be informed of all major interactions of members of NSC. The Program Director(s) will be responsible for preparing within 30 days a concise summary of each NSC meeting.
- o Serve as scientific liaison between the awardees and other NIH program staff.
- o Assist in promoting the mutagenesis facilities to the scientific community at large.
- o Assist in developing timetables for the wide distribution of biomaterials and data to the scientific community.
- o Coordinate the activities of facilities to ensure the efficient long-term storage and timely release of biomaterials and data to the wider scientific community.
- o Help determine the most appropriate mechanisms for storage and distribution

of biomaterials and data to the scientific community, i.e., storage and distribution by one of the facilities funded under this RFA and/or by another NIH-funded facility.

- o Retain the option to recommend re-allocating NIH support among awardees, as scientific goals evolve.

- o Participate in data analyses and, where warranted, co-authorship of papers resulting from projects funded under this RFA.

4. Collaborative Responsibilities - NSC Functions

All collaborative activities of awardees and NIH staff will occur through the activities of NSC, which will serve as the governing board of all the neuroscience-focused mutagenesis and phenotyping facilities funded under this RFA. NIH will interact and collaborate with the facilities through the NSC, which will include the PIs, the NIH Program Director(s), and three scientists (advisors) with relevant scientific expertise who are not affiliated with any of the facilities. These advisors will be appointed by the directors of the 7 NIH Institutes supporting this RFA, and may include PIs on projects funded under RFA MH-99-006. One of the advisors will be appointed to be the committee's chair by the Program Director(s), after consideration of recommendations made by NSC. After appointment by the Program Director(s), the Chair of NSC will schedule the first NSC meeting. The Chair will be responsible for developing meeting agendas and chairing meetings. NSC will meet at least twice per year. Additional NSC members may be added by action of NSC. Other NIH staff may attend NSC meetings, when their expertise is required for specific discussions. The Program Director(s), each PI, and each advisor will have one vote each.

NSC will coordinate the activities of the mutagenesis and phenotyping facilities and the exchange of information and biomaterials with the wider scientific community. While mutagenesis of multiple regions of varying size across the whole mouse genome will be conducted, it is expected that priorities for genomic regions and phenotypes of particular interest will be established by NSC.

NSC will discuss scientific progress, make recommendations regarding how mutations should be obtained, analyzed, and collected, in order to be maximally valuable to all interested investigators. MSP recommendations will be addressed by NSC.

5. Mouse Genomics & Genetics Scientific Panel (MSP)

MSP will coordinate activities among the facilities and resources participating in NIH's mouse mutagenesis and phenotyping initiative, including this RFA and RFA HD-99-007. MSP will use its knowledge of the activities of all of the participating facilities to ensure adequate investigation, communication and sharing, and to avoid redundant activities. It will advise NIH with respect to the coordination of all activities that involve the mutagenesis, phenotyping, maintenance, and distribution of mutant mouse strains. MSP will evaluate and make recommendations regarding the coordination of the activities of the

facilities that are funded by the mutagenesis and phenotyping initiatives, and other related activities that may be developed in the future.

It will be the responsibility of MSP to make recommendations that will lead to exchanging mutants between facilities, sharing assay strategies, adopting common policies on data sharing, creating compatible databases, and other activities that will make these facilities of maximal utility to the scientific community. MSP will also set standards for data format and nomenclature, as well as develop common guidelines and procedures for deposition of the primary phenotypic data and for the preservation of mutant mouse strains.

The committee will consist of about 10 scientists (advisors) who are not affiliated with any of the mutagenesis and phenotyping facilities, and are not members of the advisory committees of those facilities. They will be appointed by NIH. These advisors will be selected for their broad expertise in relevant topics such as, developmental biology, aging, neurobiology, behavior, mutagenesis, phenotyping, mouse genetics, husbandry, genomics, and database issues. MSP will meet at least once each year. A schedule for subsequent meetings will be prepared at the first meeting.

NIH will select one member to be the committee chair, after considering MSP's recommendations. The chair will schedule the first meeting, will be responsible for developing meeting agendas and chairing the meetings. Additional MSP members may be added by an action of the original MSP members. Program Director(s) will attend MSP as non-voting members and will act as a representative of NSC. Other NIH staff and NSC members may attend MSP meetings, when their expertise is required for specific discussions.

6. Milestones and Evaluations

Applicants should define yearly milestones in their applications, and the selected awardees will have the opportunity to modify these milestones at the time of their awards. The awardees' milestones will be provided to NSC and MSP. It is expected that the milestones should be adjusted annually at the award anniversary dates, both to incorporate a group's scientific accomplishments and progress in the field in general, as well as to reflect NSC and MSP recommendations. Following the evaluation of milestones, NIH program staff may recommend augmenting any project or reducing or withholding funds for any project that substantially fails to meet its milestones or to remain state-of-the-art.

7. Arbitration Process

Any disagreements that may arise in scientific or programmatic matters within the scope of the award between recipients and the NIH may be brought to arbitration. This special arbitration procedure in no way affects the awardee's right to appeal an adverse action that is otherwise appealable in accordance with PHS regulations 42 CFR Part 50, Subpart D and HHS regulation at 45 CFR Part 16. An Arbitration Panel will help resolve both scientific and programmatic issues that develop during the course of work that restrict progress. The Arbitration Panel will be composed of three members: a designee of NSC chosen without the NIH staff

voting, one NIH designee, and a third designee with expertise in the relevant area who is chosen by the other two (in the case of an individual disagreement, the first member is not chosen by NSC rather by the individual awardee).

OTHER SPECIAL REQUIREMENTS

Restricted availability of unique research resources, upon which further studies are dependent, can impede the advancement of research and delivery of medical care. The sharing of biomaterials, data, and software in a timely manner, on the other hand, has been an essential element in the rapid progress that has been made in the genetic analysis of mammalian genomes. PHS policy requires that investigators make unique research resources readily available for research purposes to qualified individuals within the scientific community when they have been published (PHS Grants Policy Statement in the July 12, 1996 issue of the NIH Guide to Grants and Contracts). Biomaterials (pathogen-free mutant animals, preserved sperm and embryos) and other patentable research resources (e.g., phenotyping assays, mutagenesis protocols, instrumentation) produced in projects funded by this RFA will be made available and distributed to the broader scientific community.

For applications submitted in response to this RFA, three special requirements exist regarding research resources produced in the proposed project: (1) applicants are required to include a specific plan by which they will share research resources with the wider scientific community; (2) NIH expects to make a Determination of Exceptional Circumstances (DEC) to eliminate the potential for patents on mutant mice, sperm, and embryos; and (3) applicants are required to include a plan addressing if, or how, they will exercise their intellectual property rights while making available to the broader scientific community other patentable research resources (e.g., phenotyping assays, protocols, instrumentation, and methodologies) not covered under the DEC. Each is discussed in detail below.

Plan to Share Research Resources

To address the joint interests of the government in the availability of, and access to, the results of publicly funded research NIH requires applicants who respond to this RFA to propose detailed plans for sharing the research resources generated through the grant. It is expected that the resources to be shared include all materials developed in projects funded under the RFA, including but not limited to, the following: mutant animals, preserved embryos and sperm, phenotypic and genetic data, phenotyping assays, instrumentation, and mutagenesis protocols. For this purpose, it is NIH's opinion that dissemination of such data and materials via individual laboratories and Web sites is not sufficient, as it would force interested investigators to search several different data collections to make use of the results of this initiative. It is preferable that data, protocols, technologies, and biomaterials generated in grants funded under this RFA should be placed in common, public repositories and databases that are widely accessible by investigators in the scientific community.

It is expected that the investigator's data and biomaterials sharing plan will

include the following elements: (1) establishment of and access to a comprehensive database containing detailed results from phenotyping screens; (2) access to mutants identified through high-throughput phenotyping; (3) access to preserved embryos and sperm for these mutants; (4) access to phenotyping assays not currently available to the wider scientific community that are used to characterize mutants; (5) access to mutants which have been screened but not found to have a phenotype of interest to investigators associated with this facility. This means that, before discarding rejected mice, the facility will specifically advertise their availability to the facility supported under RFA HD-99-007, and other investigators in the wider scientific research community wishing to conduct screens of their own but who do not otherwise have access to mutagenesis facilities. If demand for these mice is great enough, the facility may have to develop priorities and rules for distribution; (6) elaboration of mechanisms and protocols to be followed to promote the wide distribution of resources to investigators in the scientific community; and (7) a distribution timeline.

The initial review group will make an administrative comment on the adequacy of the proposed plan for sharing and data access. The adequacy of the plan will be considered by NIH program staff in determining whether the grant shall be awarded. The sharing plan as approved, after negotiation with the applicant when necessary, will be a condition of the award. Evaluation of renewal applications will include assessment of the effectiveness of research resource release.

It is expected that this plan includes all elements of the guidelines developed by the NIH and the Department of Energy (DOE) to address the special needs of genome research. These guidelines call for material and information from genome research to be made available within six months of the time the data or materials are collected, and are available at

http://www.nhgri.nih.gov/Grant_info/Funding/Statements/data_release.html.

Adherence with this time frame is highly desirable. More rapid sharing is encouraged. Requests for exemptions or extensions will require compelling justification and will be fully evaluated through peer review and by NIH program staff.

Where appropriate, awardees may work with the private sector to make unique resources available to the wider biomedical research community at a reasonable cost. Applicants may request funds to defray the costs of sharing resources, with adequate justification.

Intellectual Property Rights

NIH is interested in ensuring that the research resources developed through this RFA become readily available to the research community. To ensure unrestricted availability of mutant mice developed under this RFA, NIH expects to make a Determination of Exceptional Circumstances (DEC) pursuant to 37 CFR 401.3(a)(2) which will cover mutant animals, embryos, and sperm. The purpose of the DEC is to eliminate the potential for patents on mutant mice, embryos, and sperm to undermine the development of a widely available national resource that is the fundamental purpose of this RFA.

With regard to other patentable research results, such as phenotyping assays, mutagenesis protocols, instrumentation, and methodologies, NIH requires applicants who respond to this RFA to develop and propose a plan addressing if, or how, they will exercise their intellectual property rights while making available to the broader scientific community research resources produced in projects funded under this RFA. This is expected to include an elaboration of the awardee's anticipated plans to generate, or not generate, patents and/or exclusive or non-exclusive licensing of biomaterials and other patentable subject matter created in projects funded under this RFA. This plan is also expected to include disclosure of any pre-existing intellectual property rights, including options to for-profit research sponsors, that are associated with biomaterials and data that may be generated. Note that this plan will NOT include mutant animals, embryos and sperm (for which the potential for patents will be eliminated pursuant to the DEC described above). This plan also is in addition to the plan for sharing and disseminating research resources described in the previous section.

The initial review group will make an administrative comment on the proposed plan. The plan will be considered by NIH program staff in determining whether the grant shall be awarded. The plan as approved, after negotiation with the applicant when necessary, will be a condition of the award. Evaluation of renewal applications will include assessment of the awardee's adherence to the proposed plan.

Applicants are also reminded that the awardee institution is required to disclose each subject invention to NIH within two months after the inventor discloses it in writing to awardee institution personnel responsible for patent matters. The awarding Institute reserves the right to monitor awardee activity in this area to ascertain if patents or patent applications on phenotyping assays, protocols, instrumentation, methodologies or other patentable subject matter are adversely affecting the goals of this RFA.

LETTER OF INTENT

Prospective applicants are asked to submit by August 2, 1999 a letter of intent that includes a descriptive title of the proposed research, the name, address, and telephone and facsimile numbers of the PI, the identities of other key personnel and participating institutions, and the number and title of this RFA. Although a letter of intent is not required and is not binding, it is highly encouraged. The information it contains will allow NIH program staff to estimate the workload and also to avoid potential conflicts of interest in the review.

The letter of intent is to be sent to:

Dr. Hemin R. Chin
Division of Neuroscience & Basic Behavioral Science
National Institute of Mental Health
6001 Executive Boulevard, Room 7190, MSC 9643
Bethesda, MD 20892-9643

Telephone: (301) 443-1706
FAX: (301) 443-9890
Email: hemin@nih.gov

PUBLIC BRIEFING

Prospective applicants are invited to attend a briefing on this RFA and on RFA HD-99-007 on June 21, 1999 at the NIH Campus in Bethesda, MD. Interested scientists should contact the NIH program staff contact listed under LETTER OF INTENT to obtain further information. At the public briefing NIH program staff will explain the purpose of these RFAs, provide detailed instructions about the application process, and answer questions. Potential applicant institutions are urged to send a representative to this briefing, both to gather information and to exchange ideas with other potential applicants. Anyone who cannot attend this briefing will be provided with any distributed materials and with a summary of the discussion.

APPLICATION PROCEDURES

The research grant application form PHS 398 (rev. 4/98) is to be used in applying for these grants. These forms are available at most institutional offices of sponsored research and from the Division of Extramural Outreach and Information Resources, National Institutes of Health, 6701 Rockledge Drive, MSC 7910, Bethesda, MD 20892-7910, telephone (301) 435-0714, Email: GrantsInfo@nih.gov. It is also available at <http://grants.nih.gov/grants/funding/phs398/phs398.html>.

Because the application is expected to be more complex than applications for regular research projects, it may be up to forty (40) pages in length. Within this page limitation, the application should include separate sections on 1) overall strategy, purpose and plans, 2) mutagenesis (including breeding strategy), 3) phenotyping, 4) database/bioinformatics, and 5) procedures for distribution and sharing of pathogen-free biomaterials and data.

The RFA label available in the PHS 398 (rev. 4/98) application form must be affixed to the bottom of the face page of the application. Failure to use this label could result in delayed processing of the application such that it may not reach the review committee in time for review. In addition, the RFA title and number, "Mouse Mutagenesis and Phenotyping: Nervous System and Behavior - MH-99-007," must be typed on line 2 of the face page of the application form, and the YES box must be marked.

Submit a signed, typewritten original of the application, including the Checklist, and four photocopies in one package to:

CENTER FOR SCIENTIFIC REVIEW
NATIONAL INSTITUTES OF HEALTH
6701 ROCKLEDGE DRIVE, ROOM 1040, MSC 7710
BETHESDA, MD 20892-7710
BETHESDA, MD 20817 (for express/courier service)

At the time of submission, send one additional copy to:

Dr. Hemin R. Chin
Division of Neuroscience & Basic Behavioral Science
National Institute of Mental Health
6001 Executive Boulevard, Room 7190, MSC 9643
Bethesda, MD 20892-9643
Rockville, MD 20852 (for express/courier service)
Telephone: (301) 443-1706
FAX: (301) 443-9890
Email: hemin@nih.gov

Applications must be received by October 14, 1999. If an application is received after that date, it will be returned to the applicant without review. The Center for Scientific Review (CSR) will not accept any application in response to this RFA that is essentially the same as one currently pending initial review, unless the applicant withdraws the pending application. CSR will not accept any application that is essentially the same as one already reviewed. This does not preclude the submission of substantial revisions of applications already reviewed, but such applications must include an introduction addressing the previous critique. The applicants should also ensure that their revised applications respond to the review criteria by which applications in response to this RFA will be evaluated.

REVIEW CONSIDERATIONS

Upon receipt, applications will be reviewed for completeness by CSR and for responsiveness by NIH program staff. Incomplete and/or unresponsive applications will be returned to the applicant without review.

Those applications that are complete and responsive to this RFA will be evaluated for scientific and technical merit in accordance with the criteria stated below by an appropriate peer review group. There will be no site visits. As part of the initial merit review, all applications will receive a written critique and may undergo a process in which only those applications deemed to have the highest scientific merit will be discussed and assigned a priority score. All applications will receive a second level of review by the appropriate NIH National Advisory Council.

Review Criteria

The goals of NIH-supported research are to advance our understanding of biological systems, improve the control of disease, and enhance health. In their written comments reviewers will be asked to discuss the following aspects of the application in order to judge the likelihood that the proposed research will have a substantial impact on the pursuit of these goals. Each of these criteria will be addressed and considered in assigning the overall score, weighting them as appropriate for each application. Note that the application does not need to be strong in all categories to be judged likely to have major scientific impact and thus deserve a high priority score. For example, an investigator may propose to

carry out important work that by its nature is not innovative but is essential to move a field forward.

o **Significance:** What will be the expected impact of mutant mice produced by the facility on our understanding of the genetic bases of nervous system functions and complex behaviors? Will the facility have the capacity to serve as a resource for the wider scientific community?

o **Approach:** Does this study specify methodologies for rapid and efficient genome-wide mutagenesis and high-throughput phenotypic characterization? Is the conceptual framework for efficiently conducting large-scale mutagenesis across the mouse genome and comprehensive high-throughput phenotyping, adequately developed, well- integrated, and appropriate to the aims of the project? Does the proposed strategy enable identification of both dominant and recessive mutations? Does the applicant acknowledge potential problem areas and consider alternative tactics?

o **Innovation:** Does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?

o **Investigator:** Is the investigator appropriately trained and well- suited to carry out this work? Is the work proposed appropriate to the experience level of the principal investigator and other researchers (if any)?

o **Integration with other resources:** Are the plans adequate to integrate the mutants and phenotypic data with those collected in other comparable projects? Does the applicant have a plan to share with other mutagenesis and phenotyping facilities mutants that may be of interest to those facilities? Does the application reflect awareness that the proposed facility be prepared to accept mutants produced by other mutagenesis and phenotyping facilities for initial screening and/or focused characterization? Likewise, does the application reflect awareness that some of the mutants produced by the proposed facility may be sent to other mutagenesis and phenotyping facilities?

o **Exportability and accessibility:** What is the likelihood that the mutants and phenotypic information generated in the project will be made widely available in a timely fashion to the scientific community? Are state-of-the-art procedures employed to ensure the distribution of pathogen-free mutant strains, embryos, and/or sperm? What is the likelihood that other patentable research results will be widely available for the scientific community, given the proposed plan to exercise (or to not exercise) intellectual property rights regarding phenotyping assays, mutagenesis protocols, instrumentation, and methodologies? Does the project specify creation of a highly efficient and organized bioinformatics database? Do the investigator's quality control plans assure that databases provided to the wider scientific community are accurate and highly efficient?

o **Environment:** Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take advantage of unique features of the scientific environment or employ useful

collaborative arrangements? Is there evidence of institutional support?

In addition to the above criteria, in accordance with NIH policy, all applications will also be reviewed with respect to the following:

- o The reasonableness of the proposed budget and duration in relation to the proposed research.
- o The adequacy of the proposed protection for humans, animals or the environment, to the extent they may be adversely affected by the project proposed in the application.

Applicants will be evaluated in the review process for their response to the Research Objectives described above and for their ability to establish an infrastructure that will permit rapid and efficient achievement of the project aims. This will include evaluation of the proposed project's ability to serve as a resource to the broader scientific community. In addition, the plan to share research resources and the plan to exercise (or not exercise) intellectual property rights regarding patentable research resources not covered under the DEC will be judged for appropriateness. The initial review group will also examine the safety of the research environment.

AWARD CRITERIA

The earliest anticipated date of award is August 1, 2000. Subject to the availability of funds, and consonant with the priorities of this RFA, the participating Institutes will provide funds for a project period not to exceed five years. Factors that will be used to make award decisions are as follows:

- o Quality of the proposed project as determined by rigorous scientific peer review;
- o Cost effectiveness of the proposed strategy;
- o Promise of the proposed project to accomplish the goals of this RFA, by which rapid, cost-effective high-throughput mutagenesis and phenotyping will be accomplished;
- o Promise of the facility to serve as a resource for the broader scientific community;
- o Adequacy of plans to make widely available to the research community all research resources developed during the project;
- o Adequacy of plans to exercise (or not exercise) intellectual property rights while permitting wide availability to the research community of patentable research resources (e.g., phenotyping assays, mutagenesis protocols, instrumentation, and methodologies) developed during the project that are not covered under the DEC;
- o Adequacy of plans for participation by guest investigators;

- o Availability of funds.

SCHEDULE

Public Briefing: June 21, 1999
Letter of Intent Receipt Date: August 2, 1999
Application Receipt Date: October 14, 1999
Scientific Review Date: February/March 2000
Advisory Council Date: May/June 2000
Anticipated Award Date: August 1, 2000

INQUIRIES

Inquiries concerning this RFA are strongly encouraged, and NIH staff welcomes the opportunity to clarify issues or questions from potential applicants. Direct inquiries regarding programmatic issues to:

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AUTHORITY AND REGULATIONS

This program is described in the Catalog of Federal Domestic Assistance No.
93.242 (NIMH), 93.279 (NIDA), 93.273 (NIAAA), 93.866 (NIA), 93.853 (NINDS),

93.173 (NIDCD), and 93.867 (NEI). Awards are made under authorization of the Public Health Service Act, Title IV, Part A (Public Law 78-410, as amended by Public Law 99-158, 42 USC 241 and 285) and administered under PHS grants policies and Federal Regulations 42 CFR 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review. Awards will be administered under PHS grants policy as stated in the NIH Grants Policy Statement (October 1, 1998).

The PHS strongly encourages all grant recipients to provide a smoke-free workplace and promote the non-use of all tobacco products. In addition, Public Law 103-227, the Pro-Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care, or early childhood development services are provided to children. This is consistent with the PHS mission to protect and advance the physical and mental health of the American people.